

ROBERT C. WHEATLEY, CHAIRMAN
KIM HOEY STEVENSON, VICE CHAIRMAN
R. KELLER HOPKINS
HOLLY WINGATE



2 THE CIRCLE | PO BOX 417
GEORGETOWN, DE 19947
(302) 855-7878 T
(302) 854-5079 F
sussexcountyde.gov

Sussex County Planning & Zoning Commission

AGENDA

January 24, 2019

6:00 P.M.

Call to Order

Approval of Agenda

Approval of Minutes – December 20, 2018

Old Business

2018-16 Charles H. Guy, IV

HW

A standard subdivision to divide 38.286 acres +/- into 13 single family lots to be located on a certain parcel of land lying and being in Indian River Hundred, Sussex County. The portion of property that is subject for the subdivision is lying on the south side of Waterview Rd. approximately 542 ft. or miles east of Camp Arrowhead Rd. Tax Parcel: 234-12.00-22.00 (portion of). Zoning District. AR-1 (Agricultural Residential District).

C/U 2154 Arturo Granados-Gonzalez

HW

An Ordinance to grant a Conditional Use of land in an AR-1 Agricultural Residential District for a concrete construction business with equipment storage to be located on a certain parcel of land lying and being in Baltimore Hundred, Sussex County, containing 4.51 acres, more or less. The property is lying at the southwest corner of Burbage Rd. and Jones Rd., and on the south side of Burbage Rd. approximately 251 ft., and 401 ft. west of Jones Rd. 911 Address: N/A. Tax Parcels: 134-14.00-20.00, 20.03 & 20.04.

C/U 2162 Yellow Metal, LLC

KS

An Ordinance to grant a Conditional Use of land in an AR-1 Agricultural Residential District and C-1 General Commercial District for a paving construction business with an office and equipment storage to be located on a certain parcel of land lying and being in Georgetown Hundred, Sussex County, containing 39.630 acres, more or less. The property is lying on the north side of Lewes-Georgetown Hwy. (Rt. 9), approximately 0.64 mile west of Gravel Hill Rd. 911 Address: 20288 Broadogs Pl., Georgetown. Tax Parcel: 135-11.00-31.00.

C/Z 1866 Triple B Farms, LLC

KS

An Ordinance to amend the Comprehensive Zoning Map of Sussex County from an AR-



1 Agricultural Residential District to an I-1 Institutional District for a certain parcel of land lying and being in Broadkill Hundred, Sussex County, containing 18.3155 acres, more or less. The property is lying on the northeast corner of Hudson Rd. and Lewes-Georgetown Hwy. (Rt. 9). 911 Address: N/A. Tax Parcel: 235-27.00-11.01.

Public Hearings

2018-24 Good Will Farm – Joseph M. and Karen M. Zduriencik and Joel Daniel Gusky HW

A cluster subdivision to divide 56.41 acres +/- into 104 single family lots to be located on a certain parcel of land lying and being in Baltimore Hundred, Sussex County. The properties are lying on the west side of Bayard Rd, approximately 1,200 ft. north of Double Bridges Rd. Tax Parcels: 134-18.00-55.00, 134-19.00-5.00 and 6.00. Zoning District. AR-1 (Agricultural Residential District).

C/U 2155 Stockley Materials, LLC KH

An Ordinance to grant a Conditional Use of land in an AR-1 Agricultural Residential District for a borrow pit to be located on a certain parcel of land lying and being in Nanticoke Hundred, Sussex County, containing 158.74 acres, more or less. The property is lying on the southwest side of Seashore Hwy. (Rt. 18), approximately 0.72 mile southeast of Gravely Branch Rd. 911 Address: N/A. Tax Parcels: 231-6.00-21.00 and 22.01.

C/U 2157 Country Lawn Care & Maintenance, LLC (C/O Herald and Stephania Dougherty) KS

An Ordinance to grant a Conditional Use of land in an AR-1 Agricultural Residential District for a landscaping business to be located on a certain parcel of land lying and being in Indian River Hundred, Sussex County, containing 4.26 acres, more or less. The property is lying on the north side of Hollymount Rd., approximately 0.42 mile east of Beaver Dam Rd. 911 Address: 30435 Hollymount Rd., Harbeson. Tax Parcel: 234-11.00-78.07.

C/Z 1870 Coroc/Rehoboth III, LLC KS

An Ordinance to amend the Comprehensive Zoning Map of Sussex County from an AR-1 Agricultural Residential District to a C-3 Heavy Commercial District for a certain parcel of land lying and being in Lewes and Rehoboth Hundred, Sussex County, containing 10.001 acres, more or less. The property is lying on the north side of Holland Glade Rd., approximately 575 ft. east of Coastal Hwy. (Rt. 1). 911 Address: N/A. Tax Parcel: 334-13.00-325.36.

Other Business

2018-14 Lands of Shockley KH
Final Subdivision Plan

Canal Corkran, LLC. (CZ 1852) KS
Final Site Plan

2017-03 Majestic Meadows (FKA River Rock Glen) KS
Revised Subdivision Plan

2004-17 The Villages at Red Mill Pond South HW
Revised Subdivision Plan

S-18-39 Route 24 CJ, LLC/Colonial Oaks, LLC KS
Revised Site Plan

S-18-71 Baywood Garden Villas KS
Preliminary Site Plan

S-18-88 Beebe Healthcare - Rehoboth KS
Preliminary Site Plan

S-18-90 Cellco DOV Hollyville KH
Preliminary Site Plan

Planning and Zoning Commission meetings can be monitored on the internet at
www.sussexcountyde.gov.

In accordance with 29 Del. C. §10004(e)(2), this Agenda was posted on January 17, 2019, at 4:45 p.m., and at least seven (7) days in advance of the meeting.

This Agenda is subject to change to include the addition or deletion of items, including Executive Sessions, which arise at the time of the Meeting.

Agenda items listed may be considered out of sequence.

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ROBERT C. WHEATLEY, CHAIRMAN
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Sussex County Planning & Zoning Commission

PLANNING AND ZONING AND COUNTY COUNCIL INFORMATION SHEET
Planning Commission Public Hearing Date January 24, 2019

Application: 2018-24 Good Will Farms

Applicant: Gulfstream Development, LLC.
27 Atlantic Avenue Suite 101
Ocean View, DE 19970

Owner: Joseph and Karen Zduriencik
37671 Lake Ridge Drive
Selbyville, DE 19975
Parcel: 134-18.00-55.00

Joel Daniel Gusky
36826 Jahnigen Drive
Frankford, DE 19945
Parcel(s): 134-19.00-5.00 & 6.00

Site Location: On the west side of Bayard Road, approximately 1,200 ft. north of Double Bridges Road.

Zoning: AR-1 (Agricultural Residential Cluster)

Current Use: Agriculture

Proposed Use: 104 single-family lots

Comprehensive Land Use Plan Reference: Mixed Residential Area

Councilmatic District: Mr. Arlett

School District: Indian River School District

Fire District: Roxana Fire District

Sewer: Sussex County

Water: Tidewater Utilities

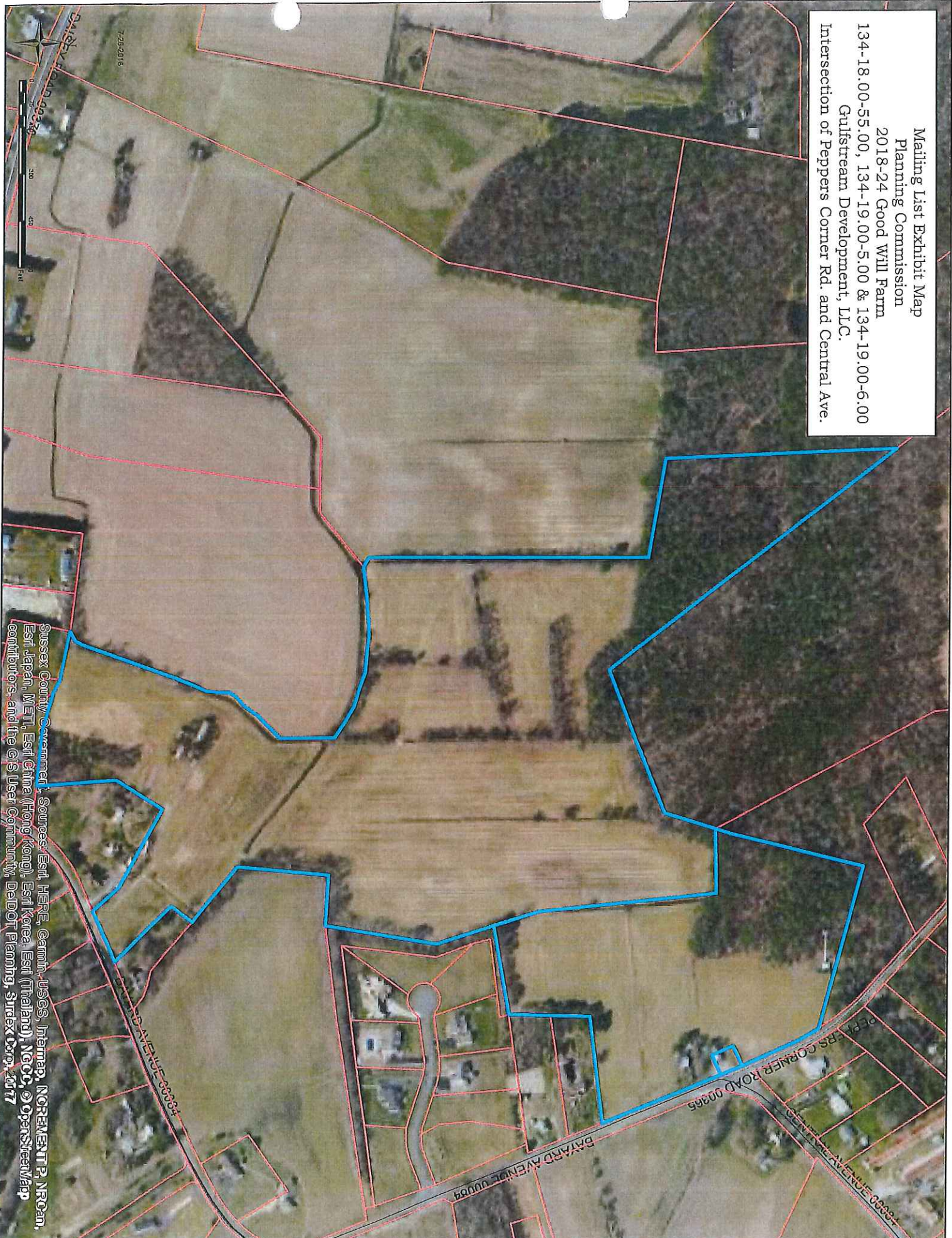


Site Area: 56.41 acres

Tax Map ID: 134-18.00-55.00, 134-19.00-5.00 & 6.00



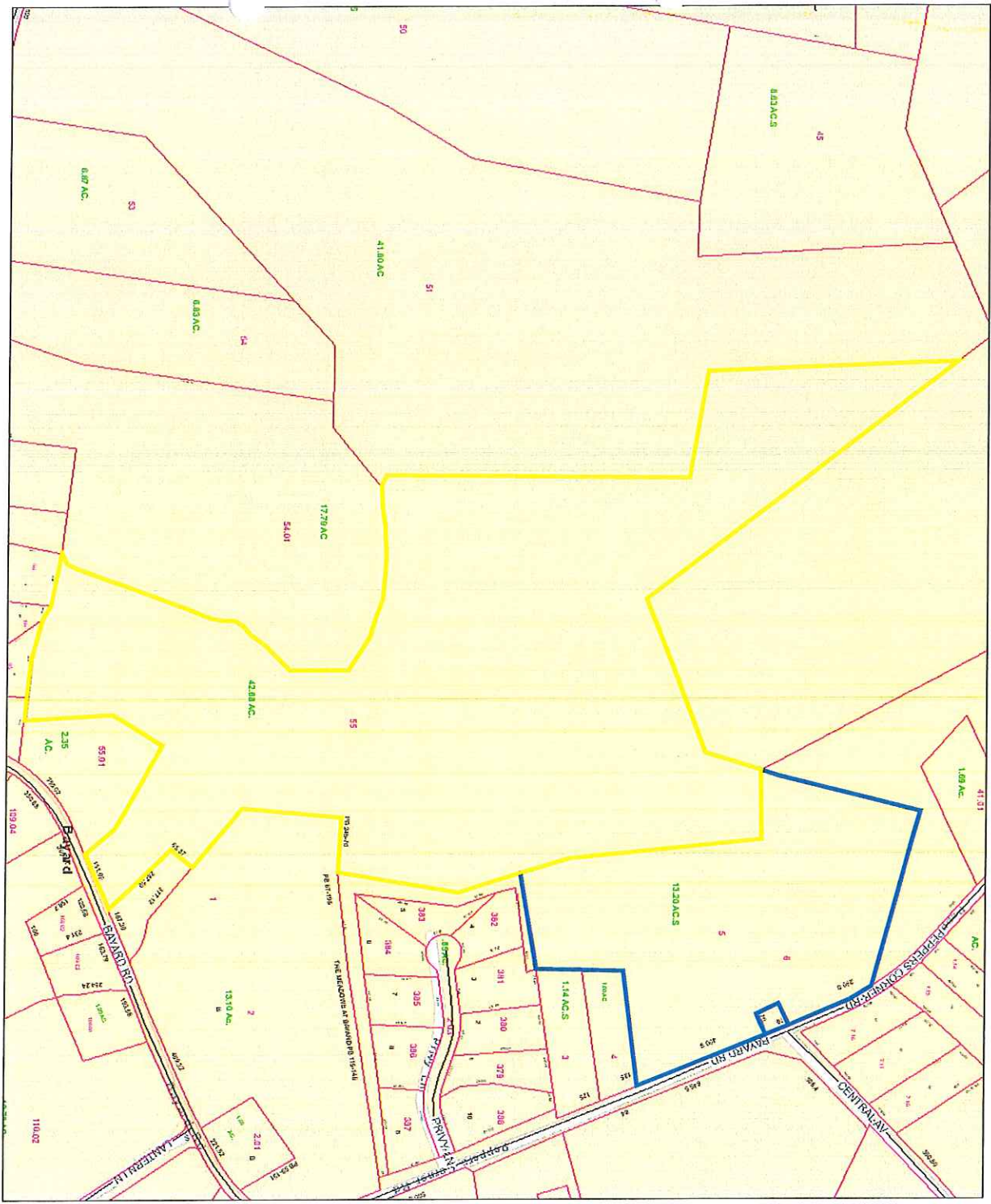
Mailing List Exhibit Map
Planning Commission
2018-24 Good Will Farm
134-18-00-55.00, 134-19-00-5.00 & 134-19-00-6.00
Gulfstream Development, LLC.
Intersection of Peppers Corner Rd. and Central Ave.



Sussex County Government, Sources: Esri, HERE, Garmin, USGS, Imagery, NRC, Esri, Japan, METI, Esri, China (Hong Kong), Esri, Korea, Esri (Thailand), NGIS, © OpenStreetMap contributors, and the GIS User Community, DeDOR Planning, Surdex Corp, 2017



Sussex County



PIN:	134-18-00-55.00
Owner Name	GULFSTREAM DEVELOPMENT LLC
Book	4972
Mailing Address	27 ATLANTIC AVE
City	OCEAN VIEW
State	DE
Description	WEST OF RT 384
Description 2	APPROX 1020' NORTH
Description 3	OF ROAD 370
Land Code	

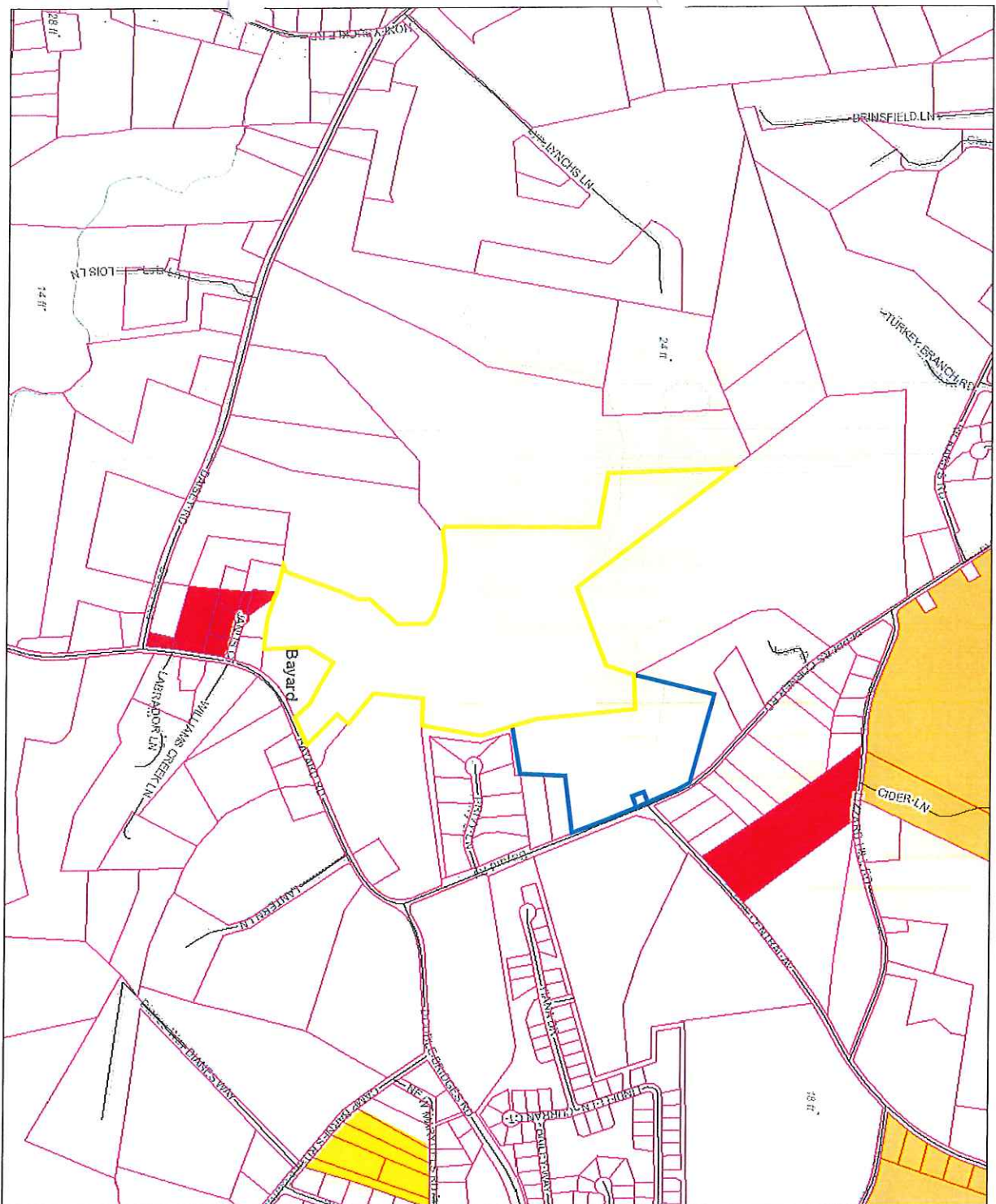
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- Override 1
- polygon layer
- Override 1
- Tax Parcels
- Streets
- County Boundaries



January 2, 2019



Sussex County



PIN	134-18-00-55-00
Owner Name	GULFSTREAM DEVELOPMENT LLC
Book	4972
Mailing Address	27 ATLANTIC AVE
City	OCEAN VIEW
State	DE
Description	WEST OF RT 384
Description 2	APPROX 1020' NORTH
Description 3	OF ROAD 370
Land Code	

- poly onlayer
 - Override 1
 - poly onlayer
 - Override 1
 - Tax Parcels
 - 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
 - General Commercial - C-1
 - Commercial Residential - CR-1
 - Marine - M
 - Limited Industrial - LI-1
 - Limited Industrial - LI-2
 - Heavy Industrial - HI-1





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

JENNIFER COHAN
SECRETARY

September 4, 2018

Ms. Janelle Cornwell, Director
Sussex County Planning & Zoning
P.O. Box 417
Georgetown, DE 19947

Dear Ms. Cornwell:

The Department has completed its review of a Service Level Evaluation Request for the **Gulfstream Development, LLC** conditional use application, which we received on August 14, 2018. This application is for a 56.61-acre assemblage of parcels (Tax Parcels: 134-18.00-55.00, 134-19.00-5.00 & 6.00). The subject land is located on the west side of Peppers Corner Road (Sussex Road 365) and Bayard Avenue (Sussex Road 84), opposite Central Avenue (Sussex Road 84). The subject land is currently zoned as AR-1 (Agricultural Residential), and the applicant is seeking a conditional use approval to development 100 single-family detached houses.

Per the 2017 Delaware Vehicle Volume Summary, the annual average daily traffic volume along Peppers Corner Road where the subject land is located, which is from Bayard Road (Sussex Road 84) to Beaver Dam Road, is 1,790 vehicles per day. As the subject land also has frontage along Bayard Road, the annual average daily traffic along that road segment, which is from Daisey Road (Sussex Road 370) to Peppers Corner Road, is 5,805 vehicles per day.

Based on our review, we estimate that the proposed land use will generate more than 50 vehicle trips per a weekly peak hour or 500 vehicle trips per day, and would be considered to have a Minor impact to the local area roadways. In this instance, the Department considers a Minor impact to be when a proposed land use would generate more than either 50 vehicle trips per a weekly peak hour and / or 500 vehicle trips per day but less than 200 vehicle trips per a weekly peak hour and 2,000 vehicle trips per day. Because of this impact, we recommend that the applicant be required to perform a Traffic Impact Study (TIS) for the subject application. However, our Development Coordination Manual provides that where a TIS is required only because the volume warrants are met, and the projected trip generation will be less than 200 vehicle trips per a weekly peak hour and less than 2,000 vehicle trips per day, DelDOT may permit the developer to pay an Area-Wide Study Fee of \$10 per daily trip in lieu of doing a TIS. For this application, if the County were agreeable, we would permit the developer to pay an Area-wide Study Fee.



Ms. Janelle M. Cornwell

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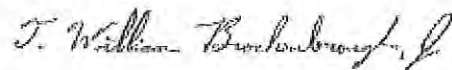
September 4, 2018

According to the Institute of Transportation Engineers (ITE) Trip Generation Manual, a development of 100 single-family detached houses would generate 1,040 vehicle trips per day, 76 vehicle trips during the morning peak hour, and 102 vehicle trips during the afternoon peak hour. As stated above, because this development would generate fewer than 2,000 vehicle trips per day and fewer than 200 vehicle trips during a weekly peak hour, the applicant has the option to pay the Area-Wide Study Fee in lieu of doing a TIS. The Area-Wide Study Fee for the proposed development would be \$10,400.00. Payment of the Area-Wide Study Fee does not relieve a developer from having to make or participate in off-site improvements.

On August 20, 2018, DelDOT met with the applicant for a TIS scoping meeting during which the applicant chose the option of conducting a TIS for the proposed development. DelDOT issued a TIS scope of work on August 29, 2018. A copy of the scope of work is enclosed with this letter.

Please contact Mr. Claudy Joinville, at (302) 760-2124, if you have questions concerning this correspondence.

Sincerely,



T. William Brockenbrough, Jr.
County Coordinator
Development Coordination

TWB:cjm

Enclosure

cc: Constance C. Holland, Coordinator, Cabinet Committee on State Planning Issues
Gulfstream Development, LLC, Applicant
J. Marc Coté, Assistant Director, Development Coordination
Gemez Norwood, South District Public Works Manager, Maintenance and Operations
Steven Sisson, Sussex County Subdivision Coordinator, Development Coordination
Derek Sapp, Subdivision Manager, Development Coordination
Brian Yates, Subdivision Manager, Development Coordination
Susanne Laws, Subdivision Manager, Development Coordination
Troy Brestel, Project Engineer, Development Coordination
Claudy Joinville, Project Engineer, Development Coordination



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

JENNIFER COHAN
SECRETARY

MEMORANDUM

TO: File

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

DATE: August 29, 2018

SUBJECT: Willow Run
Traffic Impact Study (TIS) - Scoping Meeting (08/20/18)
Scope of Work

ATTENDANCE: Doug Bolner, George, Miles & Buhr
Betty Tustin, The Traffic Group, Inc.
Jeff Clark, Land Tech Land Planning, LLC
Robert Harris, Developer
Steve Sisson, DelDOT Planning
Brian Yates, DelDOT Planning
T. William Brockenbrough, DelDOT Planning
Claudy Joinville, DelDOT Planning

Background and Discussion

Gulfstream Development, LLC seeks to develop up 100 single-family detached houses on an approximately 56.61-acre assemblage of parcels (Tax Parcels: 134-18.00-55.00, 134-19.00-5.00 & 6.00).

The land is located on the west side of Peppers Corner Road (Sussex Road 365), opposite Central Avenue (Sussex Road 84), in Sussex County. The land is currently zoned as AR-1 (Agricultural Residential), and the developer plans to develop under the County's AR-1 Cluster option.

One full access point is proposed along Peppers Corner Road, directly opposite Central Avenue. Construction is anticipated to be complete in 2022.



Cases to be Evaluated

The study shall evaluate the weekday morning and weekday evening peak hours for the following situations:

- 1) Existing (2018);
- 2) 2022 without development; and
- 3) 2022 with development.

Facilities to be Evaluated

The TIS should evaluate conditions at the following intersection for capacity and level of service using the Highway Capacity Software (HCS). It should also evaluate the extent to which it meets the relevant DelDOT, AASHTO and MUTCD standards for geometry and traffic control devices.

- 1) Site Entrance / Peppers Corner Road (Sussex Road 365)

Traffic Counts

The Consultant should conduct traffic counts for the intersection listed above from 7:00 a.m. to 9:00 a.m. and from 4:00 p.m. to 6:00 p.m., on a Tuesday, Wednesday or Thursday to determine when the peaks occur.

Additionally, an Automatic Traffic Recorder (ATR) should be used to collect traffic data on Peppers Corner Road near the area of the proposed site entrance. The ATR should be placed for a one-week time period that includes the date(s) of the manual traffic counts. The ATR data will be used to verify the manual counts and determine whether adjustments are required.

Section 2.2.8.5, item 19, under Existing Traffic and Transportation Conditions in the Development Coordination Manual addresses how oversaturated intersections are to be counted.

The traffic counts should be submitted to DelDOT both electronically as Portable Document Format (PDF)/Excel files and as draft report figures showing peak hour volumes (labeled with date and peak hour interval) posted on diagrams of the road network.

The Consultant should include counts of pedestrians, a separate count of right-turn on red (in addition to right-turn movement counts), and a separate count of heavy vehicles.

The Consultant should be alert for events affecting the traffic counts, such as accidents or nearby construction and shall make note of any such events when submitting the counts. As necessary, DelDOT reserves the right to reject the counts or require adjustments to them.

Trip Generation

The Consultant shall use the 10th edition of the ITE Trip Generation Manual in generating trips for this development.

Trip Distributions

A trip distribution to be used for the site is attached.

Growth Factors

The Consultant shall apply growth factors to the traffic counts. DeIDOT will develop those factors after we receive the Consultant's traffic counts.

The Consultant should also determine what portions of the following developments were complete at the time of any traffic counts to be used in the study and shall add in projected traffic from any unbuilt portions. The following information on the amount and types of development associated with these projects is tentative and should be verified with Sussex County and the Town of Millville.

- 1) Millers Creek (*east side of Central Avenue, north of Old Cemetery Road*) (171 multi-family houses)
- 2) Lakelynns (*northeast corner of the intersection of Peppers Corner Road*) (200 single-family detached houses)
- 3) Millville by the Sea (*south side of Burbage Road, east and west sides of Substation Road – Town of Millville*) (91 single-family detached houses, 84 townhouses)
- 4) Silverwoods a.k.a. Starlight Woods (*south side of Beaver Dam Road, east of Central Avenue – Sussex County*) (*units to be specified from Sussex County*)
- 5) Estuary (*Sussex County*) (631 single-family detached houses)

Highway Capacity Software

The Consultant shall use the most recent version of the Highway Capacity Software (HCS) that implements the 6th Edition of the Highway Capacity Manual (HCM). Presently, that is HCS7.

Seasonal Adjustment Factors for the roads in the study area are as follows:

Roads	July	August	September
Central Avenue (Sussex Road 84)	0.94	0.92	0.96
Peppers Corner Road (Sussex Road 365)	0.94	0.92	0.96
All Other Roads	1.00	1.00	1.00

DeIDOT Projects

Currently, there are no DeIDOT projects within the study area.

Transit, Bicycle, and Pedestrian Facilities

The study should describe the existing and proposed transit service in the project area and should also describe the existing and needed transit, bicycle, and pedestrian facilities on or near the project site. In determining these items, the Consultant shall contact Mr. David Dooley, a Service Development Planner at the Delaware Transit Corporation (DTC), and Mr. Anthony Aglio, of DelDOT's Statewide and Regional Planning Section. Mr. Dooley may be reached at (302) 576-6064. Mr. Aglio may be reached at (302) 760-2509.

General Notes

- 1) All submissions relating to this study should be made electronically via the Planning and Development Coordination Application (PDCA), preferably in Portable Document Format (PDF).
- 2) The Consultant is advised to read Chapter 2 in the Development Coordination Manual carefully, as our regulations have changed. A current version is available on our website at the following link: <https://deldot.gov/Business/subdivisions/index.shtml?dc=changes>.
- 3) The Consultant should e-mail DelDOT's Transportation Management Center (TMC) at tmc1@state.de.us to obtain advance approval for the use of any signal timings.
- 4) The Consultant should contact Ms. Kari Glanden, of DelDOT's Traffic Safety Section, for crash data within the study area. The Consultant shall report on this data and make recommendations for improvements if safety problems exist in the study area. Ms. Glanden may be reached at (302) 659-4069.
- 5) The Consultant should e-mail DelDOT's Transportation Management Center (TMC) at tmc1@state.de.us before installing ATRs to notify the TMC of the time, location and duration the ATRs will remain installed. The Consultant should provide contact information for the person to reach in the event of an equipment failure or other problem.
- 6) Both DelDOT and Sussex County reserve the right to change this scope of work if the study is not performed within a reasonable time.
- 7) The developer may choose to have DelDOT's Consultant perform the TOA rather than use their own Consultant. If this option is of interest, the developer should contact me at (302) 760-2167 to request a cost estimate.

Memorandum to File

August 29, 2018

Page 5 of 5

- 8) By copy of this memorandum I ask those copied to contact me at (302) 760-2124 regarding any significant errors or omissions.

CJ:cjm

Enclosure

cc: Janelle Cornwell, Director, Sussex County Planning and Zoning
Drew Boyce, Director, Planning
Michael Simmons, Assistant Director for Project Development South, DOTS
J. Marc Coté, Assistant Director, Development Coordination
Peter Haag, Traffic Studies Manager, Traffic, DOTS
Alastair Probert, South District Engineer, DOTS
Gemez Norwood, South District Public Works Supervisor, DOTS
William Kirsch, South District Permit Supervisor, DOTS
Derek Sapp, Subdivision Manager, Development Coordination
Troy Brestel, Project Engineer, Development Coordination
David Dooley, Service Development Planner, Delaware Transit Corporation
Anthony Aglio, Statewide & Regional Planning
Kari Glanden, Statistical Information Supervisor, DelDOT Traffic, DOTS
Mark Galipo, Traffic Engineer, DelDOT Traffic, DOTS
Andrew Parker, McCormick & Taylor, Inc.
Mir Wahed, Johnson, Mirmiran, & Thompson, Inc.

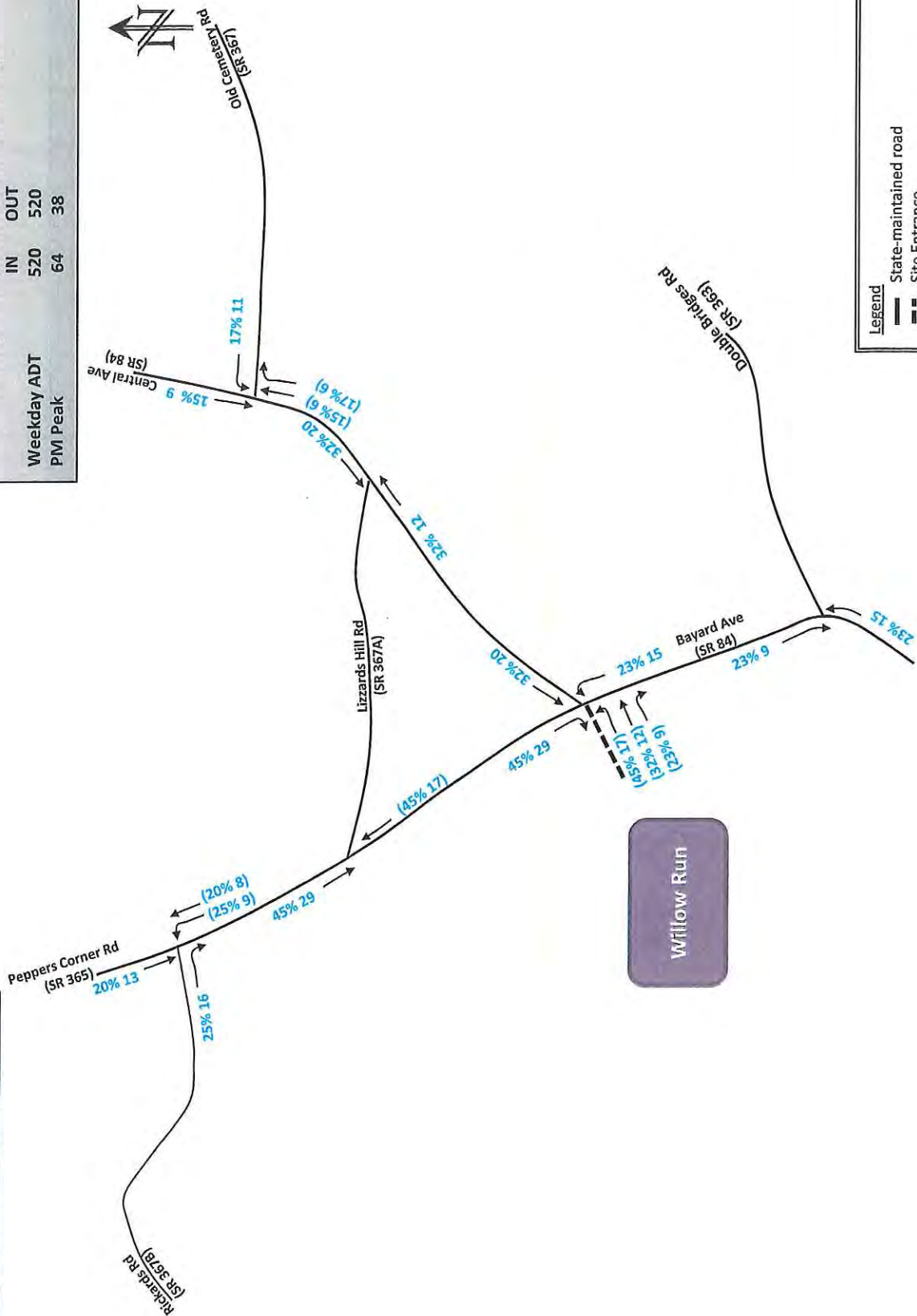
PM Peak Distribution / Assignment

August 29, 2018

Willow Run TOA

Trip Generation
100 Single-family Detached (ITE 10 LUC210)

	IN	OUT
Weekday ADT	520	520
PM Peak	64	38



Legend

- State-maintained road
- Site Entrance
- Traffic lost / gained before intersections
- State-maintained Intersections
- XX Inbound Trips
- (XX) Outbound Trips

Note: Figure Not Drawn to Scale



STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF STATE PLANNING COORDINATION

August 20, 2018

Mr. Jeff Clark, RLA
Land Tech Land Planning, LLC
Taggart Professional Center
32895 South Coastal Highway, Suite 202
Bethany Beach, DE 19930

RE: PLUS review 2018-07-07; Willow Run Subdivision

Dear Mr. ^{Jeff}~~Clark~~:

Thank you for meeting with State agency planners on July 25, 2018 to discuss the Willow Run Subdivision project. According to the information received you are seeking review of a 100 unit subdivision on 44 acres along Bayard Road in Sussex County.

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

Strategies for State Policies and Spending

This project represents land development that will result in 100 residential units in Investment Levels 3 and 4 according to the *2015 Strategies for State Policies and Spending*.

Investment Level 3 reflects areas where growth is anticipated by local, county, and state plans in the longer term future, or areas that may have environmental or other constraints to development. State investments may support future growth in these areas, but please be advised that the State has other priorities for the near future.

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.

This project is primarily in Level 4. The State does not support growth in the Level 4; therefore, the State cannot support the development of this property.

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 at the intersection of Bayard Road (Sussex Road 84), Central Avenue (also Sussex Road 84) and Peppers Corner Road (Sussex Road 365) 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.
- 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 Development Coordination 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. The PLUS application states that the

proposed development would generate 1,040 vehicle trip ends per day. DelDOT confirms that number and calculates that the development would generate 102 vehicle trip ends per hour during the evening peak hour on the adjacent roads. Therefore a TIS is warranted.

Per Section 2.2.2.2 of the Manual, developments generating fewer than 2,000 vehicle trip ends per day and fewer than 200 vehicle trip ends per hour in any hour of the day may be eligible to pay a fee, the Area Wide Study Fee, in lieu of doing a TIS. The fee is calculated as \$10 times the Average Daily Traffic volume shown on the site plan and is payable with the Initial Stage submission. Payment of the fee does not exempt the developer from responsibility to make off-site improvements or from preparing a Traffic Operational Analysis (TOA) if DelDOT identifies a need for a TOA in the plan review process.

DelDOT will require a TOA for this development to examine the need for improvements at the site entrance. DelDOT presently anticipates requiring a minor realignment of Central Avenue to create a right-angle intersection. The appropriate configuration of the intersection and the traffic control needed there will be the subject of the TOA.

- Section 3.2.4.2 of the Manual addresses the placement of right-of-way monuments (markers) along the roads on which a property fronts, in this case Bayard Road and Peppers Corner Road. Monuments sufficient to re-establish the permanent rights-of-way after the dedication discussed below should be shown on the plan and provided in the field in accordance with this section.
- 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 Bayard Road and Peppers Corner Road to meet DelDOT's standards for collector roads and local roads, respectively. By this regulation, this dedication is to provide a minimum of 40 feet of right-of-way from the physical centerline along Bayard Road and 30 feet of right-of-way from the physical centerline along Peppers Corner Road. 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 3.2.5.1.1 of the Manual, if this development is proposing a neighborhood sign/structure, then a permanent easement shall be established at the site 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.
- In accordance with Section 3.2.5.1.2 of the Manual, DelDOT will require the establishment of 15-foot wide permanent easements across the property frontage on both Bayard Road and Peppers Corner Road. The location of the easements 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.**"

- In accordance with Section 3.4 of the Manual, 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 available on the DelDOT website at <https://www.delDOT.gov/Business/subdivisions/pdfs/Critical-Items-Record-Subdivision.pdf?09222017>.
- Referring to Section 3.4.2.1 of the Manual, the following items, among other things, are required on the Record Plan:
 - A Traffic Generation Diagram. See Figure 3.4.2-a for the required format and content.
 - Depiction of all existing entrances within 450 feet of the proposed entrance on Bayard Road and within 600 feet of the proposed entrance on Peppers Corner Road.
 - Notes identifying the type of any 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. Private or municipal streets should follow the County’s requirements for connectivity.
- Section 3.5.4.2 of the Manual addresses requirements for shared-use paths and sidewalks. Referring to Section 3.5.4.2.A of the Manual, in Level 3 and 4 Investment Areas, installation of a sidewalk or Shared Use Path along the development’s road frontage is at the discretion of DelDOT’s Subdivision Engineer. Because there is significant development activity along Central Avenue, DelDOT will require a Shared Use Path along the development frontage on both Bayard Road and Peppers Corner Road and anticipates requiring crosswalks at the site entrance intersection.
- 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.
- Section 3.5.4.4 of the Manual addresses access-ways, which are similar to Shared Use Paths (SUP) but are used to connect from an SUP or sidewalk along a road to an interior trail or subdivision street when the spacing between streets is inadequate to accommodate convenient pedestrian and bicycle travel. DelDOT anticipates requiring an access-way from the south site frontage on Bayard Road to the cul de sac proposed near it.
- 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 Bayard Road and Peppers Corner Road.

- Referring to Section 4.3 of the Manual, an entrance plan shall be prepared prior to issuing entrance approval. The entrance plan submittal shall include the items listed on the Critical Items for Acceptance: Entrance/Construction/Subdivision Set Plan document available on the DelDOT website at https://www.deldot.gov/Business/subdivisions/pdfs/Critical-Items_Entrance_Construction_Subdivision.pdf?09222017.
- In accordance with Section 5.2.5.6 of the Manual, a separate turning template plan shall be provided to verify vehicles can safely enter and exit the site entrance. As per Section 5.2.3 of the Manual, the entrance shall be designed for the largest vehicle using the entrance.
- In accordance with Section 5.2.9 of the Manual, the Auxiliary Lane Worksheet should be used to determine whether auxiliary lanes are warranted at the site entrances and how long those lanes should be. The worksheet can be found at <http://www.deldot.gov/Business/subdivisions/index.shtml>.
- In accordance with Section 5.4 of the Manual, sight distance triangles are required and shall be established in accordance with American Association of State Highway and Transportation Officials (AASHTO) standards. A spreadsheet has been developed to assist with this task. It can be found at <http://www.deldot.gov/Business/subdivisions/index.shtml>.
- In accordance with Section 5.14 of the Manual, all existing utilities must be shown on the plan and a utility relocation plan will be required for any utilities that need to be relocated.
- Because the proposed development would not have State-maintained streets, Section 6.4.3 of the Manual, which pertains to the inspection and acceptance of commercial entrances, applies. Construction inspection responsibilities shall be in accordance with Figure 6.4.3-a. DelDOT's preliminary reading of this figure is that the project requires Level I inspection and that a construction inspection agreement will not be needed.
- Section 7.7.2 of the Manual addresses the need to provide 20-foot wide drainage easements for all storm drainage systems, open or closed, that fall outside the existing right-of-way or the drainage/utility easement. In accordance with this section, metes and bounds and total areas need to be shown for any drainage easements. The easements should be shown and noted on the record plan.

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

Solid and Hazardous Waste

- One of the parcels (#134-19.00-6.00) had leaking underground storage tanks on it in the past when it was occupied by Blue Hen Market (Facility ID #5-000946). A “No further action required” letter issued on November 27, 2001. The letter, which contains conditions when

disturbing the soil, can be found on the Delaware Environmental Navigator thru this link:
<https://apps.dnrec.state.de.us/dochandle/handler.ashx?docid=8a8a81ef37b6a22c0137c17078e919b5>

State Historic Preservation Office – Contact Carlton Hall 736-7404

- There are no known archaeological sites or known National Register listed or eligible properties on the parcel.
- If any project or development proceeds, the developer should be aware of the Unmarked Human Burials and Human Skeletal Remains Law (Del. C. Title 7, Ch. 54).

If there is a discovery of unmarked graves, burials or a cemetery, the Division of Historical & Cultural Affairs recommends that the plans be re-drawn to leave the full extent of the cemeteries or any burials on its own parcel or in the open space area of the development, with the responsibility for its maintenance lying with the landowner association or development. For more information, please review the following websites:

www.history.delaware.gov/preservation/umhr.shtml and
www.history.delaware.gov/preservation/cemeteries.shtml

- 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 more information on the Section 106 process please review the Advisory Council on Historic Preservation's website at the following: www.achp.gov

Delaware State Fire Marshall's Office – Contact Duane Fox 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. This means that the access road to the subdivision from the main thoroughfare must be constructed so fire department apparatus may negotiate it. If a "center island" is placed at an entrance into the subdivision, it shall be arranged in such a manner that it will not adversely affect quick and unimpeded travel of fire apparatus into the subdivision. Where traffic circles (roundabouts) are located in the subdivision, they too are to be arranged in such a manner that they will not adversely affect quick and unimpeded travel of fire apparatus throughout the subdivision. 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 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

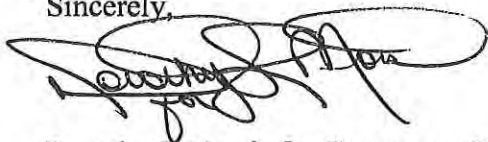
PLUS review 2018-07-07

Page 8 of 8

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Dorothy L Morris', with a large, stylized flourish extending to the right.

Dorothy L Morris for Constance C. Holland, AICP
Director, Office of State Planning Coordination

CC: Sussex County

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

TO: **Janelle Cornwell**

REVIEWER: **Chris Calio**

DATE: **1/4/2019**

APPLICATION: **2018-24 Good Will Farms**

APPLICANT: **Gulfstream Development, LLC**

FILE NO: **SPS-5.04**

TAX MAP &
PARCEL(S): **134-18.00-55.00 & 134-19.00-5.00, 6.00**

LOCATION: **On the west side of Bayard Road, approximately 1,200 feet north of Double Bridges Road.**

NO. OF UNITS: **104 single-family lots**

GROSS
ACREAGE: **56.41**

RECEIVED
JAN 07 2019
SUSSEX COUNTY
PLANNING & ZONING

RECEIVED
JAN 07
SUSSEX COUNTY
PLANNING & ZONING

SYSTEM DESIGN ASSUMPTION, MAXIMUM NO. OF UNITS/ACRE: **4**

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 2**
- (3). Is wastewater capacity available for the project? **Yes, As Proposed** If not, what capacity is available? **N/A.**
- (4). Is a Construction Agreement required? **Yes** If yes, contact Utility Engineering at (302) 855-7717.
- (5). Are there any System Connection Charge (SCC) credits for the project? **No** If yes, how many? **N/A.** Is it likely that additional SCCs will be required? **Yes** If yes, the current System Connection Charge Rate is **\$6,360.00** per EDU. Please contact **Blair Lutz** at **302-855-7719** for additional information on charges.

- (6). Is the project capable of being annexed into a Sussex County sanitary sewer district? **Yes**
- Attached is a copy of the Policy for Extending District Boundaries in a Sussex County Water and/or Sanitary Sewer District.
- (7). Is project adjacent to the Unified Sewer District? **No**
- (8). Comments: **It will take the addition of nearby parcels to become contiguous to the existing Sussex County Unified Sanitary Sewer District.**
- (9). Is a Sewer System Concept Evaluation required? **Already Completed, See Attached**
- (10). Is a Use of Existing Infrastructure Agreement Required? **Yes**

UTILITY PLANNING APPROVAL:



John J. Ashman
Director of Utility Planning

Xc: Hans M. Medlarz, P.E.
Jayne Dickerson
Blair Lutz



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

JENNIFER COHAN
SECRETARY

July 26, 2018

Ms. Constance C. Holland
Office of State Planning Coordination
122 Martin Luther King Jr. Blvd., South
Haslet Armory, Suite 302
Dover, DE 19901

Dear Ms. Holland:

This letter is to provide comments on eight of the nine applications that were discussed at the July meeting of the Preliminary Land Use Service (PLUS). Comments on the applications are enclosed. Comments on the Town of Clayton's 2018 Comprehensive Plan (PLUS 2018-07-01) will be sent separately. Descriptions of the applications follow.

Dover Mall: Power Center (PLUS 2018-07-02)

Western Development Corp. seek to develop 578,500 square feet of new commercial buildings and 18,000 square feet of building additions on an 88.42-acre assemblage of parcels (Tax Parcel Nos. ED-05-057.00-01-14.04 and 14.05). The assemblage is located on the east side of the Dover Mall. Most of the new construction would be located just outside the Mall ring road and would be served initially by that road and later also by a proposed collector-distributor road and service road parallel to Delaware Route 1. The one exception in the new construction is a 5,500 square foot pad site along US Route 13, to be built in conjunction with a realignment on the Mall's north driveway. The building additions are proposed at the Mall's northeast entrance near the existing food court. The land is zoned SC-3 and no rezoning would be needed to permit this use.

Cannon Property (PLUS 2018-07-03)

CMF Companies seeks to develop 70 single-family detached houses on a 120.77-acre assemblage of parcels (Tax Parcel Nos. 533-20.00-20.00, 21.00 and 22.00 and 533-20.19-97.00). The assemblage is located on the northwest corner of Lighthouse Road (Delaware Route 54) and Bennett Avenue near Fenwick Island. The land is zoned AR-1 and would be developed with the Cluster option; no rezoning would be needed to permit this use. DelDOT knows this development as the residential component of a mixed-use development that also includes a 6,600 square foot Quality restaurant and a 3,300 square foot high-turnover sit-down restaurant.

Peninsula Square (PLUS 2018-07-04)

Limitless Development, LLC seeks to develop apartments and commercial uses on a 30-acre parcel (Tax Parcel No. 234-23.00-115.00). The parcel is located on the north (or west) side of Delaware Route 24 and the west (or south) side of Autumn Road (Sussex Road 299). The text of the application differs somewhat from the Concept Site Plan that accompanies it but from that plan, 144 apartments, a 100-room hotel, 40,000 square feet of retail space, a 6,200 square foot restaurant and a 15,000 square foot medical office building are proposed. The parcel is zoned CR-1 and no rezoning would be needed to allow the proposed use.

Indian River School District – Sussex Central High School (PLUS 2018-07-05)

Indian River School District seeks to convert the existing Sussex Central High School on the west side of Patriots Way (Sussex Road 318) to a middle school and to build a new high school immediately south thereof, on the northwest corner of Patriots Way and Avenue of Honor (Sussex Road 86). Both schools would be contained in Tax Parcel No. 133-11.00-105.00. The land is zoned AR-1 and no rezoning would be needed to permit this use.

Warrington Property (PLUS 2018-07-06)

Bunting Macks, LLC seeks to develop 99 single-family detached houses on a 46-acre parcel (Tax Parcel No. 533-17.00-182.00). The parcel fronts on the southeast corner of Lighthouse Road (Delaware Route 54) and Hudson Road (Sussex Road 387) but the developer is keeping their frontage along Route 54 for use as a separate commercial development, with a relatively small part of the site frontage on Hudson Road being retained as access for the residential development now proposed. The land is zoned R-4 in the Town of Selbyville and no rezoning would be needed to permit this use.

Willow Run Subdivision (PLUS 2018-07-07)

Gulfstream Development, LLC seeks to develop 100 single-family detached houses on a 56-acre assemblage of parcels (Tax Parcel Nos. 134-18.00-55.00 and 134-19.00-5.00 and 6.00). The assemblage fronts on the east side of Bayard Road and Peppers Corner Road (both Sussex Road 365) with access opposite Central Avenue (Sussex Road 84). The land is zoned AR-1 and would be developed with the Cluster option; no rezoning would be needed to permit this use.

Ms. Constance C. Holland
July 26, 2018
Page 3 of 4

Wilson Moore (PLUS 2018-07-07)

Natelli Communities seeks to develop 580 single-family detached houses on a 316.02-acre assemblage of parcels (Tax Parcel Nos. 135-11.00-32.04, 48.00, 49.00 and 56.00). The assemblage fronts on the north side of US Route 9, the west side of Gravel Hill Road (Delaware Route 30) and the east side of Shingle Point Road (Sussex Road 249) with access proposed on all three roads. The land is zoned AR-1 and would be developed with the Cluster option; no rezoning would be needed to permit this use.

City of Lewes (PLUS 2018-07-09)

The City of Lewes requests a review of an amendment to the zoning map and future land use map in their 2017 Comprehensive Plan to permit a five-lot residential subdivision in place of two commercial lots on the southeast corner of Savannah Road (Sussex Road 18) and Cape Henlopen Drive (Sussex Road 19).

Agency Name: Dept. of Transportation Project Name: Cannon Property
Division: Planning Contact Person: Bill Brockenbrough

Regulations/Code Requirements

- The site access on Lighthouse Road (Delaware Route 54) 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.
- 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.
- Sections 1.2.1 and 5.2.2 of the Manual address where entrances should be located. DelDOT anticipates requiring that the Bennett Avenue intersection with Route 54 be aligned opposite Monroe Avenue, substantially as proposed.
- Per Section 2.2.2.1 of the Development Coordination 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. The PLUS application states that the proposed residential development would generate 700 vehicle trip ends per day. DelDOT calculates that the residential development would generate 756 vehicle trip ends per day and 76 vehicle trip ends per hour during the evening peak hour on Route 54. Therefore a TIS is warranted.

Per Section 2.2.2.2 of the Manual, developments generating fewer than 2,000 vehicle trip ends per day and fewer than 200 vehicle trip ends per hour in any hour of the day may be eligible to pay a fee, the Area Wide Study Fee, in lieu of doing a TIS. The fee is calculated as \$10 times the Average Daily Traffic volume shown on the site plan and is payable with the Initial Stage submission. Payment of the fee does not exempt the developer from responsibility to make off-site improvements or from preparing a Traffic Operational Analysis (TOA) if DelDOT identifies a need for a TOA in the plan review process.

On June 12, 2017, DelDOT met with the applicant and established a scope of work for a TOA to address both the subject development and two proposed restaurants. A copy of a memorandum outlining that scope is attached. DelDOT has since received the completed TOA and anticipates completing their review of it in the near future..

- Section 3.2.4.2 of the Manual addresses the placement of right-of-way monuments (markers) along the roads on which a property fronts, in this case Bennett Avenue and Delaware Route 54. Monuments, sufficient to re-establish the permanent rights-of-way

07/26/18

after the realignment discussed above and the dedication discussed below, should be shown on the plan and provided in the field in accordance with this section.

- 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 Route 54. By this regulation, this dedication is to provide a minimum of 40 feet from the physical centerline of Route 54. 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 3.2.5.1.1 of the Manual, if this development is proposing a neighborhood sign/structure, then a permanent easement shall be established at the site 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.
- 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 Route 54. 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.**"
- In accordance with Section 3.4 of the Manual, 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 available on the DelDOT website at <https://www.del.dot.gov/Business/subdivisions/pdfs/Critical-Items-Record-Subdivision.pdf?09222017>.
- Referring to Section 3.4.2.1 of the Manual, the following items, among other things, are required on the Record Plan:
 - A Traffic Generation Diagram. See Figure 3.4.2-a for the required format and content.
 - Depiction of all existing entrances within 450 feet of the proposed Bennett Avenue intersection.
 - Notes identifying the type of any off-site improvements, agreements (signal, letter) contributions and when the off-site improvements are warranted. As discussed above, DelDOT anticipates requiring the relocation of Bennett Avenue to align opposite Monroe Avenue and perpendicular to Route 54.
- 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. Private or municipal streets should follow the County's requirements for connectivity.

- Section 3.5.4.2 of the Development Coordination Manual addresses requirements for shared-use paths and sidewalks. Referring to Section 3.5.4.2.A of the Manual, developments in Level 3 and 4 Areas are required to install a sidewalk or Shared Use Path along their frontage if the property abuts to an existing facility. If the project does not abut an existing facility, it will be at the Subdivision Engineer's discretion. DelDOT anticipates requiring a Shared Use Path along the development frontage on Route 54.
- 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 Route 54.
- Referring to Section 4.3 of the Manual, an entrance plan shall be prepared prior to issuing entrance approval. The entrance plan submittal shall include the items listed on the Critical Items for Acceptance: Entrance/Construction/Subdivision Set Plan document available on the DelDOT website at https://www.deldot.gov/Business/subdivisions/pdfs/Critical-Items_Entrance_Construction_Subdivision.pdf?09222017.
- In accordance with Section 5.2.5.6 of the Manual, a separate turning template plan shall be provided to verify vehicles can safely enter and exit the site entrance. As per Section 5.2.3 of the Manual, the entrance shall be designed for the largest vehicle using the entrance.
- In accordance with Section 5.2.9 of the Manual, the Auxiliary Lane Worksheet should be used to determine whether auxiliary lanes are warranted at the site entrances and how long those lanes should be. The worksheet can be found at <http://www.deldot.gov/Business/subdivisions/index.shtml>.
- In accordance with Section 5.4 of the Manual, sight distance triangles are required and shall be established in accordance with American Association of State Highway and Transportation Officials (AASHTO) standards. A spreadsheet has been developed to assist with this task. It can be found at <http://www.deldot.gov/Business/subdivisions/index.shtml>.
- In accordance with Section 5.14 of the Manual, all existing utilities must be shown on the plan and a utility relocation plan will be required for any utilities that need to be relocated.

- Because the proposed development would not have State-maintained streets, Section 6.4.3 of the Manual, which pertains to the inspection and acceptance of commercial entrances, applies. Construction inspection responsibilities shall be in accordance with Figure 6.4.3-a. DelDOT's preliminary reading of this figure is that the project requires Level I inspection and that a construction inspection agreement will not be needed.
- Section 7.7.2 of the Manual addresses the need to provide 20-foot wide drainage easements for all storm drainage systems, open or closed, that fall outside the existing right-of-way or the drainage/utility easement. In accordance with this section, metes and bounds and total areas need to be shown for any drainage easements. The easements should be shown and noted on the record plan.

Suggestions

- Section 3.2.4.1 of the Manual addresses the placement of right-of-way monuments (markers) along subdivision streets. DelDOT recommends that monuments be furnished and placed along the proposed streets in accordance with this section.
- The applicant should expect a requirement that any substation and/or wastewater facilities will be required to have access from an internal street or driveway with no direct access to Route 54.
- The applicant should expect a requirement that all PLUS and Technical Advisory Committee (TAC) comments be addressed prior to submitting plans for review.
- Please be advised that the Standard General Notes were updated on December 8, 2017, and posted to the DelDOT website. The notes can be found at <http://www.delDOT.gov/Business/subdivisions/index.shtml>.



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

JENNIFER COHAN
SECRETARY

MEMORANDUM

TO: File

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

DATE: July 11, 2017
Revised November 28, 2017

SUBJECT: Cannon Property
Traffic Operational Analysis (TOA) – Scoping Meeting (06/12/2017)
Scope of Work

ATTENDANCE: Bill Conway, Century Engineering
Patrick Reid, CMF Companies
Steve Marsh, GMB Architects / Engineers
Mark Galipo, DelDOT Planning
Steve Sisson, DelDOT Planning
Scott Johnson, DelDOT Planning
Claudy Joinville, DelDOT Planning

Note Concerning Revision

This document has been updated to reflect a reduction in the density of the proposed single-family detached houses from 90 units to 70 units, and the addition of two restaurants.

Background and Discussion

CMF Companies seeks to develop a 6,600 square-foot quality restaurant, a 3,300 square-foot high-turnover sit-down restaurant, and 70 single-family detached houses on an approximately 125.72-acre assemblage of parcels (Tax Parcels 533-20.00-20.00 & 22.00). The land is currently zoned as AR-1(Agricultural Residential), and the developer does not plan to rezone the land.

The land is located on the northwest corner of the intersection of Delaware Route 54 and Bennett Avenue, west of Fenwick Island. One full access is proposed along Delaware Route 54, by way of Bennett Avenue. Construction is anticipated to be complete in 2021.

Memorandum to File
July 11, 2017
Revised November 28, 2017
Page 2 of 7

Because this development would generate fewer than 2,000 trips per day and fewer than 200 trips during a weekly peak hour, DelDOT informed the developer of the option to pay the Area-Wide Study Fee in lieu of doing a Traffic Impact Study. They chose the option to pay the Area-wide Study Fee. With this option, the developer will pay the above-mentioned fee and complete a TOA for the proposed development.

Cases to be Evaluated

The study shall evaluate the weekday morning, weekday evening, and summer Saturday mid-day peak hours for the following situations:

- 1) Existing (2017);
- 2) 2021 without development; and
- 3) 2021 with development.

Facilities to be Evaluated

The TOA should evaluate conditions at the following intersections for capacity and level of service using the Highway Capacity Software (HCS). It should also evaluate the extent to which they meet the relevant DelDOT, AASHTO and MUTCD standards for geometry and traffic control devices.

- 1) Delaware Route 54 / Bennett Avenue (provides Site Access)
- 2) Delaware Route 54 / Monroe Avenue
- 3) Delaware Route 54 / Jefferson Avenue

Realignment of Bennett Avenue and Monroe Avenue at Delaware Route 54

During the scoping meeting, DelDOT and the developer discussed and agreed on realigning Bennett Avenue with Monroe Avenue to create a four-way intersection along Delaware Route 54. A four-way intersection instead of two offset three-way intersections would ensure efficient traffic operation in the area when the subject site is developed.

Signal Justification Study

A full Traffic Signal Justification Study, including a Traffic Signal Warrant Analysis, should be completed for the intersection of Delaware Route 54 and Bennett Avenue / Monroe Avenue in its realigned configuration.

The Traffic Signal Justification Study and Warrant Analysis should be submitted to DelDOT with the final TOA report, formatted as an appendix to the TOA. Upon our review of the study, DelDOT will determine whether a traffic signal would be warranted when the proposed development opens. An outline of the required content for this study is provided below.

Memorandum to File
July 11, 2017
Revised November 28, 2017
Page 3 of 7

For more information on this study, the Consultant shall contact Mr. Peter Haag, DelDOT's Traffic Studies Manager. Mr. Haag may be reached at (302) 659-4084.

- 1) Analysis of existing conditions:
 - Approach lane widths
 - Approach lane configurations
 - Location and lengths of exclusive turn lanes (storage and taper length should be noted separately)
 - Other geometric features
 - Horizontal and vertical geometry (description)
 - Roadside features
 - Adjacent land use
 - Pedestrian use: Evaluate the impact a pedestrian crosswalk may have at the subject intersection. A recommended location for the crosswalk(s) should be provided, considering both pedestrian path desire lines and the impact to vehicular traffic. The study should take into consideration NCHRP Report 562.

- 2) Collection and analysis of turning movement count data:
 - 12 hours' worth of data is ideal, but 8 hours is acceptable (include surrounding peak periods)
 - Separate cars from heavy vehicles
 - Bicycles and pedestrians

- 3) Collision data:
 - Obtain at least three (3) years of data to be used for the traffic signal warrant analysis
 - Use the Highway Safety Manual to compare existing crash history to predicted crash expectancy.

- 4) Traffic signal warrant analysis:
 - Three scenarios are typically analyzed:
 - Existing conditions (Is a signal warranted now?)
 - Build out of proposed site to determine when a traffic signal would be warranted. How many lots would warrant a signal? (Multiple scenarios may be required based on the construction schedule. The analysis should reflect the construction schedule, keeping in mind the Plan Review approval process, of the site.
 - Complete build out of the site (Is a signal warranted only when the entire site is built out?)
 - Warrants are provided in the Delaware Manual on Uniform Traffic Control Devices

- Use NCHRP 457 to determine the right turn volume adjustment. Right turns typically do not have an impact on the signal operations, especially if channelized, and can be reduced significantly in the warrant evaluation.

5) Intersection Capacity Analysis

- Evaluate the operation of the intersection based on the outcome of the traffic signal warrant analysis. If a signal is warranted, how will the intersection operate? If not, how will the intersection operate?
- Evaluate queue lengths at impacted intersection and effected intersections in the surrounding area.
- Conduct a Critical Movement Summation analysis at the impacted intersection.
- If applicable, evaluate the impact a pedestrian crosswalk may have at the impacted intersection. A recommended location for the crosswalk should be provided.
- Coordinate with the Transportation Management Center on traffic signal timing aspects for the corridor.
- Complete a bandwidth analysis to evaluate signal spacing aspects, if signal is warranted.
- How will left turns be phased? Flashing red arrow, protected, protected-permissive? DelDOT recommends using the methodology in the Traffic Design Manual to determine an appropriate left turn phasing.

Traffic Counts

The Consultant should count traffic, **pedestrians and bicycles** from 7:00 a.m. to 9:00 a.m., from 4:00 p.m. to 6:00 p.m. on a Tuesday, Wednesday, or Thursday, and from 10:00 a.m. to 2:00 p.m. on a Saturday, to determine when the peaks occur. The Saturday counts should be conducted at a time when local area schools, as well as schools in the nearby metropolitan areas of Philadelphia, Baltimore, and Washington, D.C, are closed in June, July or August.

Additionally, an automatic traffic recorder (ATR) should be used to collect traffic data on Delaware Route 54 near the area of the proposed site entrance.

Section 2.2.8.5, item 19, under Existing Traffic and Transportation Conditions in the Development Coordination Manual, addresses how oversaturated intersections are to be counted.

The traffic counts should be submitted to DelDOT both electronically as Portable Document Format (PDF)/Excel files and as draft report figures showing peak hour volumes (labeled with date and peak hour interval) posted on diagrams of the road network.

The Consultant should include counts of pedestrians and a separate count of heavy vehicles.

DelDOT Projects

Currently, there are no active DelDOT projects within the study area.

Transit, Bicycle, and Pedestrian Facilities

The study should describe the existing and proposed transit service in the project area and should also describe the existing and needed transit, bicycle, and pedestrian facilities on or near the project site. In determining these items, the Consultant shall contact Mr. David Dooley, a Service Development Planner at the Delaware Transit Corporation (DTC), and Mr. Anthony Aglio, of DelDOT's Local Systems Planning Section. Mr. Dooley may be reached at (302) 576-6064. Mr. Aglio may be reached at (302) 760-2509.

General Notes

- 1) All submissions relating to this study should be made electronically via the Planning and Development Coordination Application (PDCA), preferably in Portable Document Format (PDF).
- 2) The Consultant is advised to read Chapter 2 in the Development Coordination Manual carefully, as our regulations have changed. A current version is available on our website at <http://www.deldot.gov/information/business/subdivisions/changes/index.shtml> following link:
- 3) The Consultant shall contact Mr. James Clacher of DelDOT's Transportation Management Center (TMC), to obtain advance approval for the use of any signal timings. Mr. Clacher may be reached at (302) 659-4603.
- 4) The Consultant should contact Ms. Kari Glanden, of DelDOT's Traffic Safety Section, for crash data within the study area. The Consultant shall report on this data and make recommendations for improvements if safety problems exist in the study area. Ms. Glanden may be reached at (302) 659-4069.
- 5) The Consultant should e-mail DelDOT's Transportation Management Center (TMC) at tmc1@state.de.us before installing ATRs to notify the TMC of the time, location and duration the ATRs will remain installed. The Consultant should provide contact information for the person to reach in the event of an equipment failure or other problem.
- 6) Both DelDOT and Sussex County reserve the right to change this scope of work if the study is not performed within a reasonable time.
- 7) The developer may choose to have DelDOT's Consultant perform the TOA rather than use their own Consultant. If this option is of interest, the developer should contact me at (302) 760-2167 to request a cost estimate.

Memorandum to File
July 11, 2017
Revised November 28, 2017
Page 7 of 7

- 8) By copy of this memorandum I ask those copied to contact me at (302) 760-2124 regarding any significant errors or omissions.

CJ:cjm

Enclosures

cc: Chris Sylvester, Century Engineering
Janelle Cornwell, Director, Sussex County Planning and Zoning
Drew Boyce, Director, Planning
Michael Simmons, Assistant Director for Project Development South, DOTS
J. Marc Coté, Assistant Director, Development Coordination
Peter Haag, Traffic Studies Manager, Traffic, DOTS
James Clacher, TMC Supervisor, Traffic, DOTS
Alastair Probert, South District Engineer, DOTS
Gemez Norwood, South District Public Works Supervisor, DOTS
William Kirsch, South District Permit Supervisor, DOTS
Derek Sapp, Subdivision Manager, Development Coordination
Claudy Joinville, Project Engineer, Development Coordination
David Dooley, Service Development Planner, Delaware Transit Corporation
Anthony Aglio, Statewide & Regional Planning
Kari Glanden, Statistical Information Supervisor, DelDOT Traffic, DOTS
Phillip Petrucci, Senior Application Support Specialist, OIT
Mark Galipo, Traffic Engineer, DelDOT Traffic, DOTS
T. William Brockenbrough, Jr., County Coordinator, Development Coordination
Troy Brestel, Project Engineer, Development Coordination
Andrew Parker, McCormick & Taylor, Inc.
Mir Wahed, Johnson, Mirmiran, & Thompson, Inc.

PM Peak Distribution

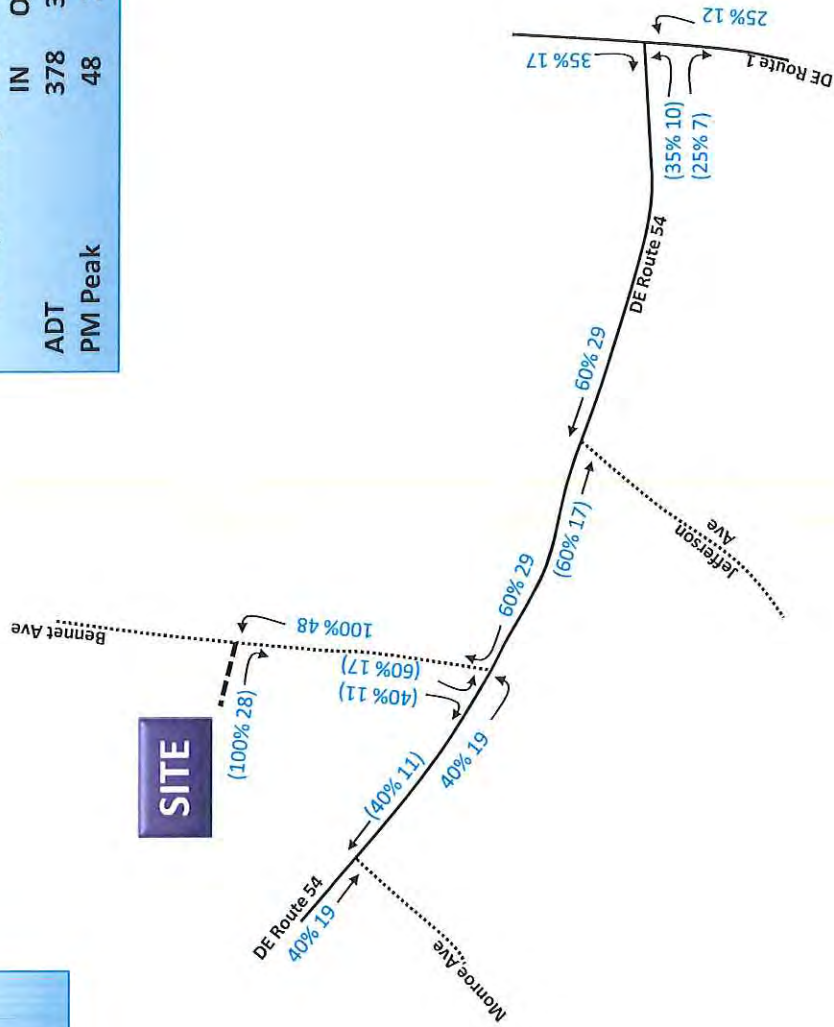
July 11, 2017

November 28, 2017

Cannon Property - TOA

70 single-family detached houses – ITE 210

	IN	OUT
ADT	378	378
PM Peak	48	28



Legend

- State-maintained road
- Site Entrance
- Traffic lost / gained before intersections
- State-maintained Intersections
- Municipal road

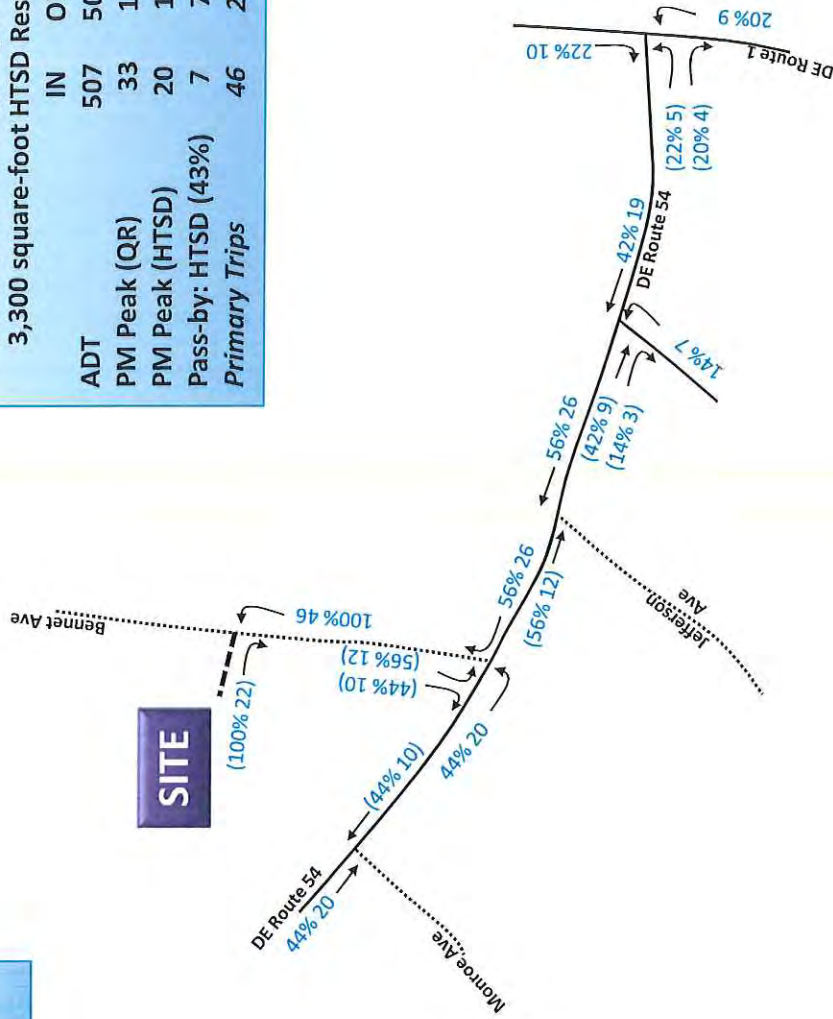
Note: Figure Not Drawn to Scale

PM Peak Distribution
November 28, 2017

Cannon Property - TOA

6,600 square-foot Quality Restaurant – ITE 931
3,300 square-foot HTSD Restaurant – ITE 932

	IN	OUT
ADT	507	507
PM Peak (QR)	33	16
PM Peak (HTSD)	20	13
Pass-by: HTSD (43%)	7	7
Primary Trips	46	22



Legend

- State-maintained road
- Site Entrance
- Traffic lost / gained before intersections
- State-maintained Intersections
- Municipal road

Note: Figure Not Drawn to Scale

Agency Name: Dept. of Transportation Project Name: Peninsula Square
Division: Planning Contact Person: Bill Brockenbrough

Regulations/Code Requirements

- The site access on John J. Williams Highway (Delaware Route 24) and Autumn Road (Sussex Road 299) 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.
- 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.
- Sections 1.2.1 and 5.2.2 of the Manual address where entrances should be located. DelDOT offers three comments in this regard:
 - The proposed full access on Delaware Route 24 is not acceptable. Pending the results of a Traffic Impact Study (TIS) discussed below, DelDOT anticipates allowing left and right turn movements entering the site and right turn movements exiting on Route 24.
 - The access proposed on Autumn Road is unacceptably close to Route 24.
 - DelDOT anticipates allowing full access on Autumn Road about 600 feet west of Route 24 at an existing 90-degree turn on Autumn Road.
- Per Section 2.2.2.1 of the Development Coordination 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. The PLUS application states that the proposed development would generate about 4,000 vehicle trip ends per day. DelDOT finds that that figure may be low. Calculating for separate uses, without allowance for internal capture, they find that the development would generate 5,634 vehicle trip ends per day on weekdays and 485 vehicle trip ends per hour during the evening peak hour of the adjacent roads. While internal capture, meaning trips between uses on the site, will reduce those numbers somewhat, it is apparent that a TIS is warranted. DelDOT will require that a TIS be done.

The purpose of a TIS is to identify needed off-site improvements. Presently, DelDOT has a safety improvement project, HSIP SC, SR 24 @ Mount Joy Road to Bay Farm Road, that will improve the site frontage on both Route 24 and Autumn Road. The developer would need to coordinate their access improvements with the project just

mentioned and contribute toward the cost of the project. More information about the project is available at https://www.deldot.gov/information/projects/SR24_MountJoy_BayFarmRd/index.shtml or by contacting DelDOT 's Project Manager, Mr. Mark Whiteside. Mr. Whiteside may be reached at Mark.White@state.de.us or (302) 760-2127.

- Section 3.2.4.2 of the Manual addresses the placement of right-of-way monuments (markers) along the roads on which a property fronts, in this case Route 24 and Autumn Road. Monuments sufficient to re-establish the permanent rights-of-way after the dedication discussed below should be shown on the plan and provided in the field in accordance with this section.
- 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 Route 24 and Autumn Road to meet DelDOT's standards for collector roads and local roads, respectively. By this regulation, this dedication is to provide a minimum of 40 feet of right-of-way from the physical centerline along Route 24 and 30 feet of right-of-way from the physical centerline along Autumn Road. 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 3.2.5.1.1 of the Manual, if this development is proposing a neighborhood sign/structure, then a permanent easement shall be established at the site 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.
- In accordance with Section 3.2.5.1.2 of the Manual, DelDOT will require the establishment of 15-foot wide permanent easements across the property frontage on both Route 24 and Autumn Road. The location of the easements 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."**
- In accordance with Section 3.4 of the Manual, 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 available on the DelDOT website at <https://www.deldot.gov/Business/subdivisions/pdfs/Critical-Items-Record-Subdivision.pdf?09222017>.
- Referring to Section 3.4.2.1 of the Manual, the following items, among other things, are required on the Record Plan:
 - A Traffic Generation Diagram. See Figure 3.4.2-a for the required format and content.

- Depiction of all existing entrances within 450 feet of the proposed entrance on Route 24 and within 300 feet of the proposed entrance on Autumn Road.
- Notes identifying the type of any 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. Private or municipal streets should follow the County's requirements for connectivity.
- Section 3.5.4.2 of the Manual addresses requirements for shared-use paths and sidewalks. Referring to Section 3.5.4.2.A of the Manual, installation of a sidewalk or Shared Use Path along the development's road frontage is required for developments generating more than 2,000 vehicle trip ends per day. DelDOT will require a Shared Use Path along the development frontage on both Route 24 and Autumn Road.
- 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 Route 24 and Autumn Road.
- Referring to Section 4.3 of the Manual, an entrance plan shall be prepared prior to issuing entrance approval. The entrance plan submittal shall include the items listed on the Critical Items for Acceptance: Entrance/Construction/Subdivision Set Plan document available on the DelDOT website at https://www.deldot.gov/Business/subdivisions/pdfs/Critical-Items_Entrance_Construction_Subdivision.pdf?09222017.
- In accordance with Section 5.2.5.6 of the Manual, a separate turning template plan shall be provided to verify vehicles can safely enter and exit the site entrance. As per Section 5.2.3 of the Manual, the entrance shall be designed for the largest vehicle using the entrance.
- In accordance with Section 5.2.9 of the Manual, the Auxiliary Lane Worksheet should be used to determine whether auxiliary lanes are warranted at the site entrances and how long those lanes should be. The worksheet can be found at <http://www.deldot.gov/Business/subdivisions/index.shtml>.
- In accordance with Section 5.4 of the Manual, sight distance triangles are required and shall be established in accordance with American Association of State Highway and Transportation Officials (AASHTO) standards. A spreadsheet has been developed to

assist with this task. It can be found at <http://www.delDOT.gov/Business/subdivisions/index.shtml>.

- In accordance with Section 5.14 of the Manual, all existing utilities must be shown on the plan and a utility relocation plan will be required for any utilities that need to be relocated.
- Because the proposed development would not have State-maintained streets, Section 6.4.3 of the Manual, which pertains to the inspection and acceptance of commercial entrances, applies. Construction inspection responsibilities shall be in accordance with Figure 6.4.3-a. DeIDOT's preliminary reading of this figure is that the project requires Level I inspection and that a construction inspection agreement will not be needed.
- Section 7.7.2 of the Manual addresses the need to provide 20-foot wide drainage easements for all storm drainage systems, open or closed, that fall outside the existing right-of-way or the drainage/utility easement. In accordance with this section, metes and bounds and total areas need to be shown for any drainage easements. The easements should be shown and noted on the record plan.

Suggestions

- As mentioned above, DeIDOT anticipates requiring that the site access on Autumn Road be located where Autumn Road presently turns 90 degrees. Such an access would mean improving a four-way intersection presently formed by Autumn Road, Branch Road (a subdivision street) and driveway (labeled on some maps as Messiah Lane) through the subject site to an outparcel (Tax Parcel 234-23.00-114.01). The Concept Site Plan presented would relocate access to the outparcel onto Branch Road. Because DeIDOT foresees the site's Autumn Road access being about where a driveway behind a retail building is proposed on the plan, DeIDOT recommends that the outparcel access be maintained substantially where it is now and served through that driveway.

Similarly, DeIDOT recommends shifting the proposed roundabout intersection on the site farther west, to the apartment complex entrance.

- Section 3.2.4.1 of the Manual addresses the placement of right-of-way monuments (markers) along subdivision streets. DeIDOT recommends that monuments be furnished and placed along the proposed streets in accordance with this section.
- The applicant should expect a requirement that any substation and/or wastewater facilities will be required to have access from an internal street or driveway with no direct access to Route 24 or Autumn Road.
- The applicant should expect a requirement that all PLUS and Technical Advisory Committee (TAC) comments be addressed prior to submitting plans for review.

- Please be advised that the Standard General Notes were updated on December 8, 2017, and posted to the DelDOT website. The notes can be found at <http://www.deldot.gov/Business/subdivisions/index.shtml>.

Agency Name: Dept. of Transportation Project Name: Sussex Central High School
Division: Planning Contact Person: Bill Brockenbrough

Regulations/Code Requirements

- The site access on Avenue of Honor and Patriots Way (respectively Sussex Roads 86 and 318) 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.
- 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.
- Sections 1.2.1 and 5.2.2 of the Manual address where entrances should be located. The proposed entrance on Avenue of Honor should be moved far enough east that entering traffic will not queue across the railroad tracks.
- Per Section 2.2.2.1 of the Development Coordination 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. The PLUS application states that the proposed school would generate 2,500 vehicle trip ends per day. Therefore a TIS is warranted and DelDOT will require that a TIS be done.

The purpose of a TIS is to identify needed off-site improvements. Improvements that DelDOT can identify without a TIS include improvement of Avenue of Honor to meet DelDOT local road standards, including 11-foot lanes and 6-foot shoulders in both directions from US Route 13 to Patriots Way. Preliminarily, it appears that a signal may be needed at the intersection of Avenue of Honor and US Route 113. Related to the TIS, DelDOT anticipates requiring a Traffic Signal Justification Study for this location.

- Section 3.2.4.2 of the Manual addresses the placement of right-of-way monuments (markers) along the roads on which a property fronts, in this case Avenue of Honor and perhaps Patriots Way. Monuments sufficient to re-establish the permanent rights-of-way after the dedication discussed below should be shown on the plan and provided in the field in accordance with this section.
- 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 Patriots Way and Avenue of Honor to meet DelDOT's standards for collector roads and local roads, respectively. By this regulation, this dedication is to provide a minimum of 40 feet of right-of-way from the physical centerline along Patriots Way and 30 feet of right-of-way

from the physical centerline along Avenue of Honor. Preliminarily, it appears that the existing right-of-way is sufficient on Patriots Way. 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 15-foot wide permanent easements across the property frontage on both Patriots Way and Avenue of Honor. The location of the easements 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.”**
- In accordance with Section 3.4 of the Manual, 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 available on the DelDOT website at <https://www.deldot.gov/Business/subdivisions/pdfs/Critical-Items-Record-Subdivision.pdf?09222017>.
- Referring to Section 3.4.2.1 of the Manual, the following items, among other things, are required on the Record Plan:
 - A Traffic Generation Diagram. See Figure 3.4.2-a for the required format and content.
 - Depiction of all existing entrances within 450 feet of the proposed entrance on Patriots Way and within 600 feet of the proposed entrance on Avenue of Honor.
 - Notes identifying the type of any 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. Private or municipal streets should follow the County’s requirements for connectivity.
- Section 3.5.4.2 of the Manual addresses requirements for shared-use paths and sidewalks. Referring to Section 3.5.4.2.A of the Manual, installation of a sidewalk or Shared Use Path along the development’s road frontage is required for developments generating more than 2,000 vehicle trip ends per day. DelDOT will require a Shared Use Path along the development frontage on both Patriots Way and Avenue of Honor.
- 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 Patriots Way and Avenue of Honor.
- Referring to Section 4.3 of the Manual, an entrance plan shall be prepared prior to issuing entrance approval. The entrance plan submittal shall include the items listed on the Critical Items for Acceptance: Entrance/Construction/Subdivision Set Plan document available on the DeIDOT website at [https://www.deldot.gov/Business/subdivisions/pdfs/Critical-Items Entrance Construction Subdivision.pdf?09222017](https://www.deldot.gov/Business/subdivisions/pdfs/Critical-Items%20Entrance%20Construction%20Subdivision.pdf?09222017).
- In accordance with Section 5.2.5.6 of the Manual, a separate turning template plan shall be provided to verify vehicles can safely enter and exit the site entrance. As per Section 5.2.3 of the Manual, the entrance shall be designed for the largest vehicle using the entrance.
- In accordance with Section 5.2.9 of the Manual, the Auxiliary Lane Worksheet should be used to determine whether auxiliary lanes are warranted at the site entrances and how long those lanes should be. The worksheet can be found at <http://www.deldot.gov/Business/subdivisions/index.shtml>.
- In accordance with Section 5.4 of the Manual, sight distance triangles are required and shall be established in accordance with American Association of State Highway and Transportation Officials (AASHTO) standards. A spreadsheet has been developed to assist with this task. It can be found at <http://www.deldot.gov/Business/subdivisions/index.shtml>.
- In accordance with Section 5.14 of the Manual, all existing utilities must be shown on the plan and a utility relocation plan will be required for any utilities that need to be relocated.
- Because the proposed development would not have State-maintained streets, Section 6.4.3 of the Manual, which pertains to the inspection and acceptance of commercial entrances, applies. Construction inspection responsibilities shall be in accordance with Figure 6.4.3-a. DeIDOT's preliminary reading of this figure is that the project requires Level I inspection and that a construction inspection agreement will not be needed.
- Section 7.7.2 of the Manual addresses the need to provide 20-foot wide drainage easements for all storm drainage systems, open or closed, that fall outside the existing right-of-way or the drainage/utility easement. In accordance with this section, metes and bounds and total areas need to be shown for any drainage easements. The easements should be shown and noted on the record plan.

Suggestions

- Section 3.2.4.1 of the Manual addresses the placement of right-of-way monuments (markers) along subdivision streets. DeIDOT recommends that monuments be furnished and placed along the proposed streets in accordance with this section.
- The applicant should expect a requirement that any substation and/or wastewater facilities will be required to have access from an internal street or driveway with no direct access to Patriots Way or Avenue of Honor.
- The applicant should expect a requirement that all PLUS and Technical Advisory Committee (TAC) comments be addressed prior to submitting plans for review.
- Please be advised that the Standard General Notes were updated on December 8, 2017, and posted to the DeIDOT website. The notes can be found at <http://www.deldot.gov/Business/subdivisions/index.shtml>.

GOOD WILL FARM

SUSSEX COUNTY, DELAWARE

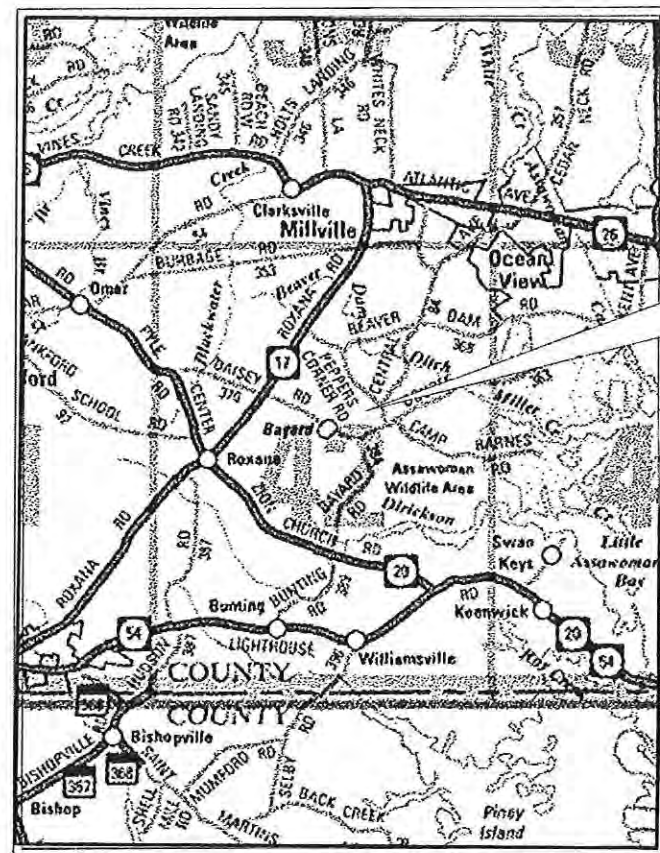
PRELIMINARY SUBDIVISION PLAN

TAX MAP 134-18.00-55.00 & 134-19.00-5.00 & 6.00

LIST OF DRAWINGS

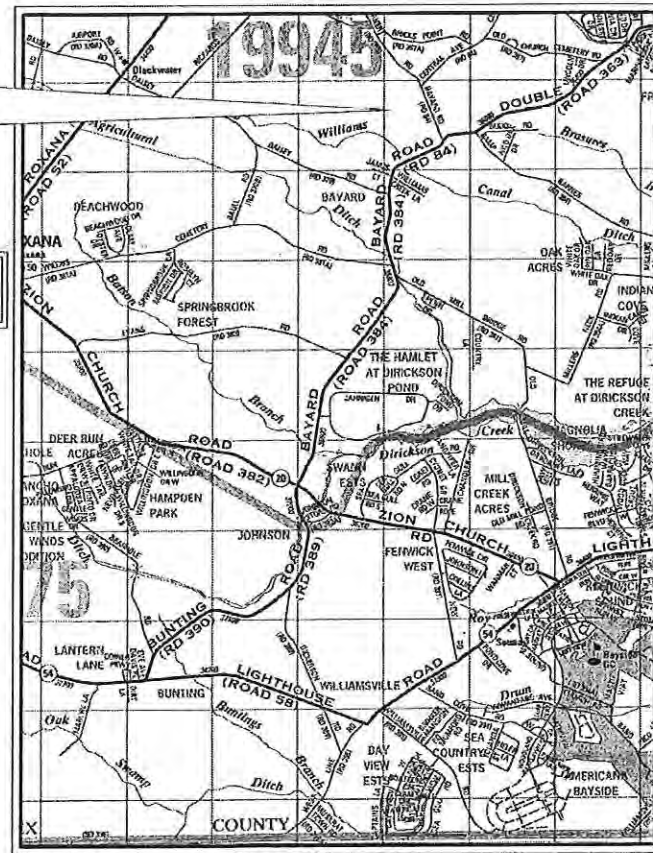
PSP-1.0	COVER SHEET
PSP-2.0	KEY SHEET - EXISTING CONDITIONS
PSP-2.1	EXISTING CONDITIONS
PSP-2.2	EXISTING CONDITIONS
PSP-3.0	KEY SHEET - PROPOSED SITE PLAN
PSP-3.1	PROPOSED SITE PLAN
PSP-3.2	PROPOSED SITE PLAN
PSP-4.0	SITE PLAN REMARKING

GMB FILE NO. 100157



GOOD WILL FARM

PROJECT LOCATION



VICINITY MAP
SCALE: 1" = 1 MILE

LOCATION MAP
SCALE: 1" = 2000'

- NOTES:**
- ALL INTERIOR SIDE LOT LINES ARE RESERVED FOR THE CENTERLINE OF A 10' WIDE DRAINAGE AND/OR UTILITY EASEMENT. A 10' WIDE DRAINAGE AND/OR UTILITY EASEMENT IS RESERVED ON EACH LOT ALONG THE FRONT AND REAR PROPERTY LINES. THIS PLAN AND SURVEY DOES NOT VERIFY THE EXISTENCE OR NON-EXISTENCE OF RIGHT-OF-WAYS OR EASEMENTS PERTAINING TO THIS PROPERTY.
 - MAINTENANCE OF THE STREETS WITHIN THIS SUBDIVISION WILL BE THE RESPONSIBILITY OF THE DEVELOPER, THE PROPERTY OWNERS WITHIN THE SUBDIVISION, OR BOTH. THE STATE ASSUMES RESPONSIBILITY FOR THE FUTURE MAINTENANCE OF STREETS WITH DEDICATED DELDOT RIGHT-OF-WAYS ONLY.
 - MAINTENANCE OF STORM DRAIN AND STORMWATER MANAGEMENT FACILITIES WILL BE THE RESPONSIBILITY OF THE DEVELOPERS, THE PROPERTY OWNERS WITHIN THE SUBDIVISION, OR BOTH. THE STATE ASSUMES RESPONSIBILITY FOR THE FUTURE MAINTENANCE OF STORM DRAIN WITH DEDICATED DELDOT RIGHTS OF WAY ONLY.
 - ALL SIDEWALKS MUST BE INSTALLED IN CONJUNCTION WITH THE ROADS, AND FOR THE PROJECT TO ACHIEVE SUBSTANTIAL COMPLETION FROM THE PUBLIC WORKS DIVISION.
 - WATER SERVICE WILL BE PROVIDED BY CONNECTION TO AN EXISTING PUBLIC SYSTEM. ALL DISTRIBUTION EQUIPMENT WILL BE INSTALLED AND MAINTAINED BY THE WATER UTILITIES, INC. ALL PROPOSED FACILITIES WILL BE SUBJECT TO REVIEW AND APPROVAL BY SUSSEX COUNTY AND DELAWARE DIVISION OF PUBLIC HEALTH.
 - WASTEWATER TREATMENT AND DISPOSAL WILL BE PROVIDED BY THE SUSSEX COUNTY ENGINEERING DEPARTMENT, SOUTH COASTAL WASTE WATER TREATMENT FACILITY. THE COLLECTION AND TRANSMISSION SYSTEM WILL CONSIST OF VARIOUS DIAMETER GRAVITY SEWERS. THE COLLECTION AND TRANSMISSION SYSTEM WILL BE SUBJECT TO REVIEW AND APPROVAL BY SUSSEX COUNTY AND DHEC.
 - THERE IS ACTIVE AGRICULTURAL PROPERTY GREATER THAN 10 ACRES DIRECTLY ADJUTING THE PROPOSED DEVELOPMENT.
 - NON-TIDAL WETLANDS EXIST ON THE PROPERTY.
 - STORMWATER MANAGEMENT PRACTICES WILL BE DESIGNED TO MEET STORMWATER QUALITY AND QUANTITY MANAGEMENT REQUIREMENTS. ALL STORMWATER MANAGEMENT DESIGN WILL BE IN ACCORDANCE WITH DELAWARE STORMWATER DESIGN MANUAL STANDARDS.
 - EASEMENTS SHALL BE PROVIDED WHERE NECESSARY TO MEET PUBLIC UTILITY REQUIREMENTS. NECESSARY EASEMENTS ALONG PERMETER BOUNDARIES OF THE DEVELOPMENT SHALL BE NO LESS THAN TEN (10) FEET IN WIDTH ON THE INTERIOR SIDE OF THE BOUNDARY.
 - BOUNDARY & TOPOGRAPHICAL SURVEY SHOWN HEREIN PROVIDED BY TRUE NORTH LAND SURVEYING DATE, JULY 27, 2018.
 - PROJECT WILL BE CONSTRUCTED IN PHASES.
 - THE POOL AND CLUBHOUSE AMENITY WILL BE AVAILABLE FOR THE RESIDENTS OF THE ENTIRE GOOD WILL FARM COMMUNITY.
 - EXISTING TAX DITCHES AND THEIR RESPECTIVE RIGHTS OF WAY ARE TO BE MAINTAINED IN ACCORDANCE WITH COURT ORDER CHANGE AGREEMENTS AND DIRECT DRAINAGE PROGRAM REQUIREMENTS.
 - ALL WOODED BUFFERS, OPEN SPACES, PARKS, TRAILS, AND POOL / BATHHOUSE WILL BE MAINTAINED IN PERPETUITY BY THE WILLOW RUN HOMEOWNER'S ASSOCIATION.
 - THE GOOD WILL FARM SITE WILL RESULT IN THE CREATION OF BOTH ACTIVE AND PASSIVE OPEN SPACE AREAS WITHIN THE SUBDIVISION BOUNDARIES.
 - THE PASSIVE OPEN SPACE AREAS ARE CONFINED TO THE TWO EXISTING WETLANDS POCKETS IDENTIFIED BY WATERSHED ECO DURING THE WETLAND DELINEATION PROCESS AND THE PROPOSED EXTENSIVE PERMETER LANDSCAPE BUFFERING SYSTEM. THOSE EXISTING WETLANDS THAT ARE CURRENTLY WOODED, ARE IN A STABLE CONDITION AND EXTENSIVELY VEGETATED WITH NATIVE SPECIES THROUGHOUT. THE MANAGEMENT OF THE EXISTING PASSIVE OPEN SPACE AREAS WILL BE TO PRESERVE NATIVE TREES AND SHRUBS IN THE CURRENT CONDITION. NO CLEARING, DISTURBANCE, OR ALTERING OF VEGETATION SHALL BE PERMITTED EXCEPT THE REMOVAL OF DEAD AND DYING TREES, WHICH POSE A THREAT TO PUBLIC SAFETY OR ADJACENT PRIVATE PROPERTY.
 - THE LANDSCAPE BUFFER AREAS WILL BE VEGETATED IN CONFORMANCE WITH A DETAILED PLAN PREPARED UNDER THE DIRECTION OF A DELAWARE LICENSED LANDSCAPE ARCHITECT AND APPROVED BY THE DELAWARE STATE FORESTRY DEPARTMENT. THE GUIDELINES FOR PREPARATION OF THE LANDSCAPE BUFFER ARE FOUND IN THE SUSSEX COUNTY CODE. MAINTENANCE OF LANDSCAPE BUFFER AREAS WILL BE UNDER THE DIRECTION OF QUALIFIED ARBORISTS AND MAINTENANCE PROFESSIONALS UNDER CONTRACT TO THE GOOD WILL FARM HOME OWNER'S ASSOCIATION.
 - THE BALANCE OF THE OPEN SPACE IN GOOD WILL FARM WILL BE USED MORE ACTIVELY BY THE RESIDENTS AND THEIR GUESTS. THESE AREAS ARE ADDING STORM WATER PONDS AND TAX DITCH SYSTEMS WHICH WILL REQUIRE MAINTENANCE CONFORMING TO DHEC DIVISION OF WATERSHED STANDARDS. AN OPEN SPACE MANAGEMENT PLAN WILL BE DEVELOPED BY A QUALIFIED PROFESSIONAL THAT WILL OUTLINE THE PROGRAM FOR PERPETUAL MAINTENANCE AND ADDRESS PESTICIDES AND FERTILIZER APPLICATION RATES AND FREQUENCY SCHEDULES. THE PERPETUAL MAINTENANCE WILL BE ACCOMPLISHED BY QUALIFIED INDIVIDUALS AND FIRMS SPECIALIZING IN THIS FIELD AND UNDER CONTRACT TO THE GOOD WILL FARM HOME OWNER'S ASSOCIATION. THE GOOD WILL FARM RESTRICTIVE COVENANTS WILL REQUIRE THE HOME OWNERS TO ENGAGE A QUALIFIED PROFESSIONAL TO IMPLEMENT THE OPEN SPACE MANAGEMENT PLAN.

SITE DATA:

DEVELOPER: GOLFSTREAM DEVELOPMENT, LLC, 27 ATLANTIC AVENUE SUITE 101 OCEAN VIEW, DE 19970	OWNERS: JOSEPH & YAREN ZDURENCHIK 3771 LANE ROUGE DR SELBYVILLE, DE 19975 PARCEL 134-18.00-55.00
CONTACT: ROBERT J. HARRIS, JR. 302-539-6178	JOEL DANIEL GUSKO 3625 JENNIFER DR FRANKFORD, DE 19945 PARCELS 134-19.00-5.00 & 6.00
CIVIL ENGINEER: GEORGE, MILES & BUHR, LLC 206 WEST MAIN STREET SALISBURY, MD 21801	LANDSCAPE ARCHITECTURE: LANDTECH LAND PLANNING, LLC 3295 S COASTAL HWY TAGHART PROFESSIONAL CENTER, SUITE 202 BETHANY BEACH, DE 19930 CONTACT: JEFFERY CLARK, P.L.A. 302-539-2369
TAX DISTRICT 134, MAP 18.00, PARCEL 55.00 AND TAX DISTRICT 134, MAP 19.00, PARCELS 5 & 6	
SITE AREA - GROSS AREA: 56.41 ACRES EXISTING WOODED AREA: 10.19 ACRES WOODED AREA TO REMAIN: 4.62 ACRES EXISTING NON TIDAL WETLANDS: 0.96 ACRES	
PROPOSED OPEN SPACE: 21.26 ACRES (11%) (SWM PONDS, WOODED WETLANDS, WOODED BUFFER, TAX DITCH ROW)	
PROPOSED DEVELOPED AREA: 31.45 ACRES (56%)	
ZONING DATA: PRESENT ZONING: AR-1 PROPOSED ZONING: AR-CLUSTER PRESENT USE: AGRICULTURAL PROPOSED USE: RESIDENTIAL	
UNIT COUNTS: SINGLE FAMILY: 104	
ALLOWABLE DENSITY: 2 UNITS/ACRE = 112 UNITS	
GROSS DENSITY: 1.83 UNITS/ACRE NET DENSITY: 3.58 UNITS/ACRE	
MIN LOT WIDTH: 75' MIN LOT DEPTH: 100' MIN LOT AREA: 7500 SF	
SETBACKS: FRONT: 25' SIDE: 10' REAR: 10'	
REQUIRED PARKING: 2 OFF STREET PARKING SPACES PER LOT PARKING PROVIDED: 2 OFF STREET PARKING SPACES PER LOT	
AMENITIES: NEIGHBORHOOD POOL, ACTIVE AND PASSIVE OPEN SPACE	
FLOOD ZONE X - AREAS TO BE DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN PER FEMA MAP# 100504954, DATED MAR 16, 2015	
WATER PROVIDER - TIDEWATER UTILITIES, INC.	
SEWER PROVIDER - SUSSEX COUNTY	

DEVELOPER'S CERTIFICATION:
I HEREBY CERTIFY THAT I AM THE DEVELOPER OF THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN AND THAT THE PLAN WAS MADE AT MY DIRECTION.

DATE _____

GOLFSTREAM DEVELOPMENT, LLC,
27 ATLANTIC AVENUE
OCEAN VIEW, DELAWARE 19970

WETLANDS CERTIFICATION:
THIS SITE HAS BEEN EXAMINED FOR THE PRESENCE OF WATERS OF THE STATE (SUBADJACENT LANDS) AND WATERS OF THE U.S., INCLUDING WETLANDS, IN ACCORDANCE WITH THE PROCEDURES SET FORTH IN REGULATION AND POLICY. THE FEATURES DEPICTED ON THIS PLAN ACCURATELY REPRESENT THE FEATURES IDENTIFIED AND FLAGGED BY THE FIELD BY WATERSHED ECO LLC AND DESCRIBED IN WRITTEN REPORTS.

DATE _____

JAMES C. MCDALLEY IV, PWS # 000471

ENGINEER'S CERTIFICATION:
I, STEPHEN L. MARSH, P.E., HEREBY CERTIFY THAT I AM A REGISTERED ENGINEER IN THE STATE OF DELAWARE, THAT THE INFORMATION SHOWN HERE HAS BEEN PREPARED UNDER MY SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEVE REPRESENTS GOOD ENGINEERING PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.

DATE 1/14/19

STEPHEN L. MARSH, P.E.
GEORGE, MILES & BUHR, LLC
206 W. MAIN STREET
SALISBURY, MD 21801

GMB **LAND TECH**

GEORGE, MILES & BUHR, LLC
ARCHITECTS & ENGINEERS
SALISBURY • BALTIMORE • SEAFORD

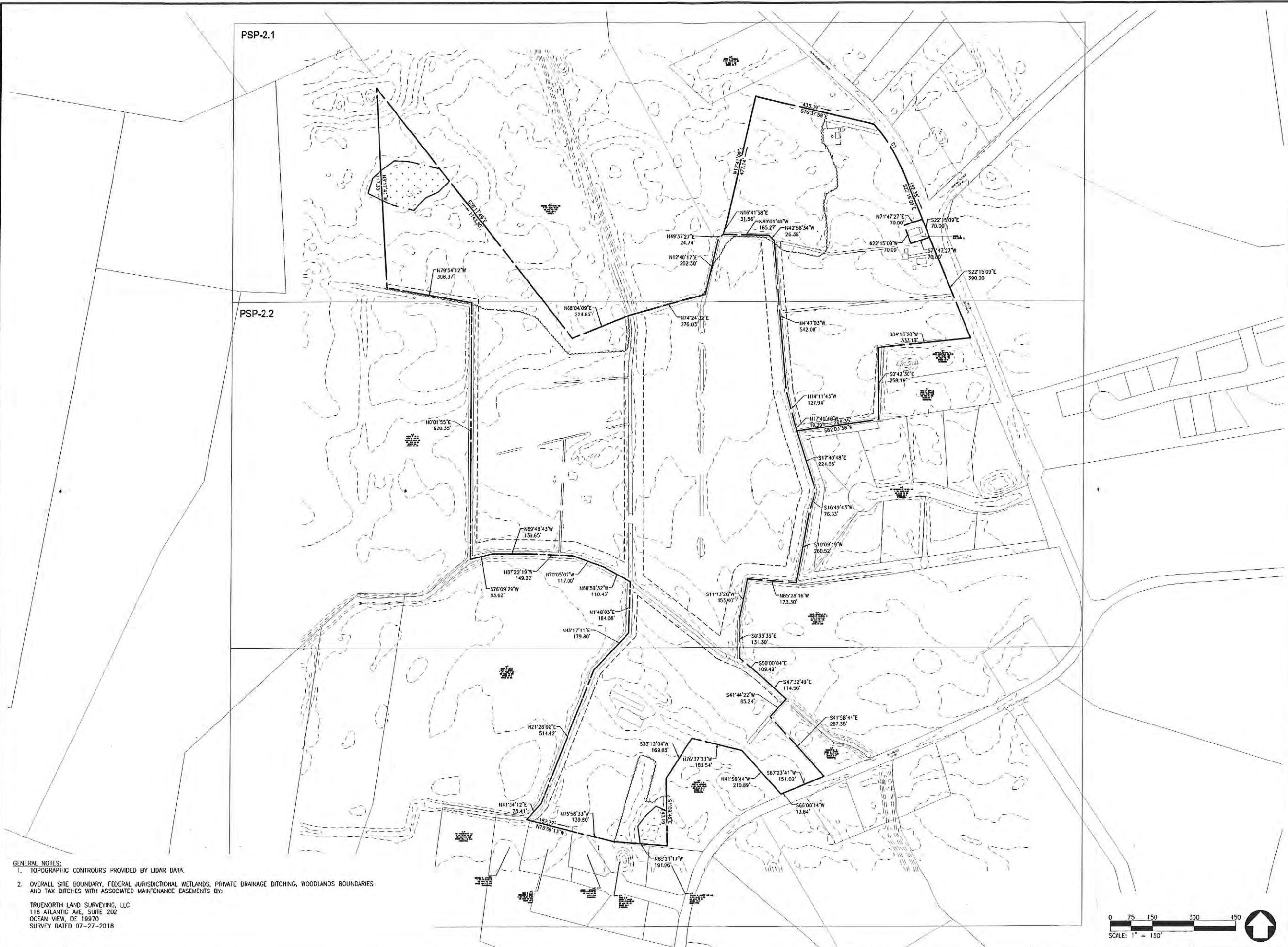
206 WEST MAIN STREET
SALISBURY, MARYLAND 21801
410-742-3115, FAX 410-548-5780
www.gmbnet.com

3295 S COASTAL HWY
TAGHART PROFESSIONAL CENTER, SUITE 202
BETHANY BEACH, DELAWARE 19930
PHONE: (302) 539-2369

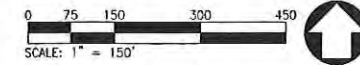
JANUARY 2019

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C:\Projects\2018\180157 - Misc. Res. Subdivision\Drawings\Working Sets\Plan\PSP-2.0 KEY SHEET - EXISTING CONDITIONS.dwg, 1/11/2019 10:41 AM, Leslie Wick
 DWG: LESLIE WICK
 PLOT: JAC
 PLOT DATE: 1/11/2019 10:41 AM
 PLOT SCALE: 1" = 150'
 PLOT SHEET: PSP-2.0
 PLOT TOTAL SHEETS: 2
 PLOT SHEET NO.: 1



GENERAL NOTES:
 1. TOPOGRAPHIC CONTOURS PROVIDED BY LIDAR DATA.
 2. OVERALL SITE BOUNDARY, FEDERAL JURISDICTIONAL WETLANDS, PRIVATE DRAINAGE DITCHING, WOODLANDS BOUNDARIES AND TAX DITCHES WITH ASSOCIATED MAINTENANCE EASEMENTS BY:
 TRUENORTH LAND SURVEYING, LLC
 118 ATLANTIC AVE, SUITE 202
 OCEAN VIEW, DE 19970
 SURVEY DATED 07-27-2018

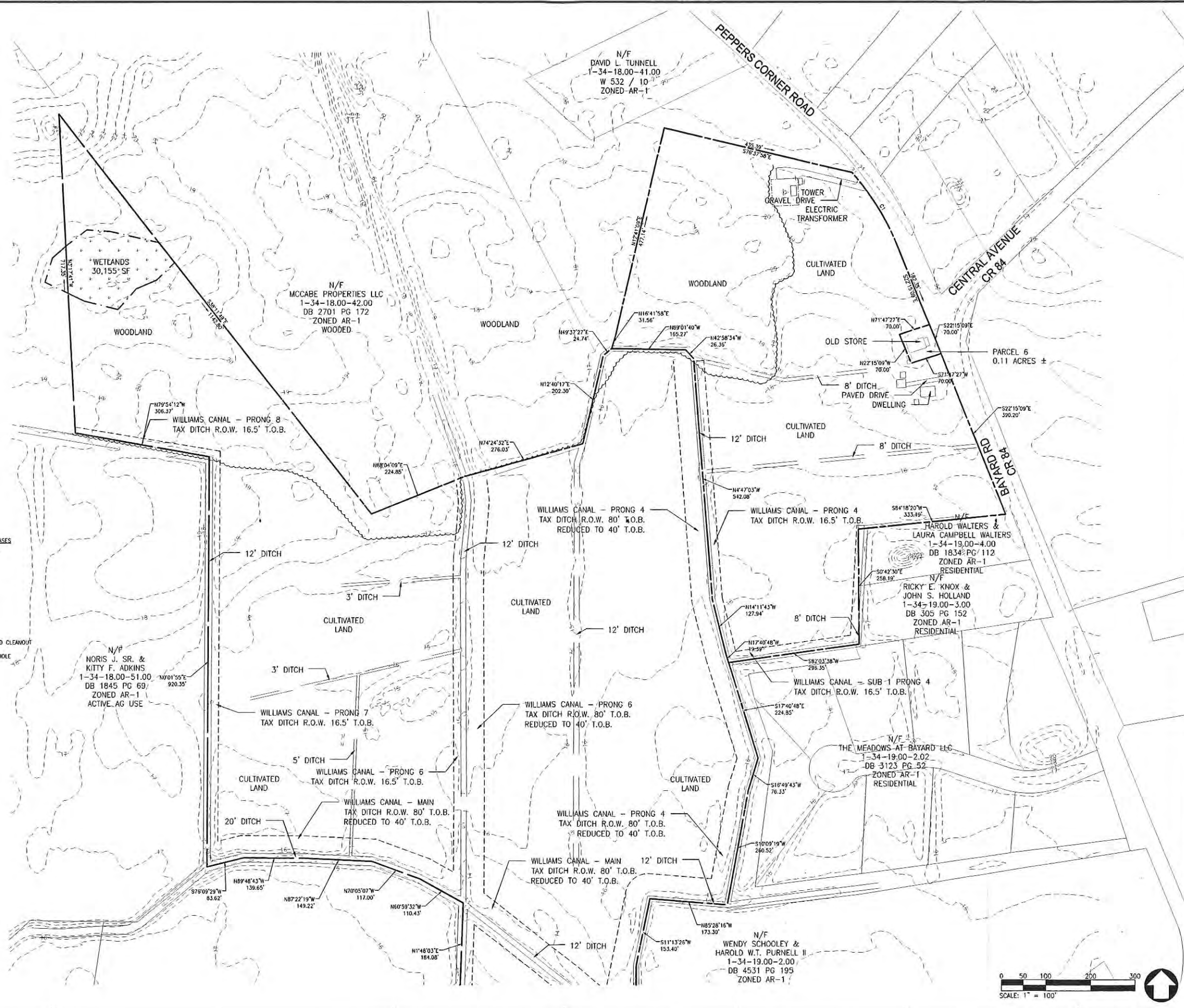


PRINTS ISSUED FOR: DRAWINGS STAGE	
DATE	
REVISIONS	
NO.	
<p style="font-size: 8px; margin: 0;">LAND PLANNING, LLC 3299 S COASTAL HWY, SUITE 202 FARGART BEACH, DELAWARE 19930 PHONE: (302) 539-2396</p>	
<p style="font-size: 8px; margin: 0;">GMB GEORGE, MILES & BUHR, LLC ARCHITECTS & ENGINEERS SALISBURY - BALTIMORE - SEAFORD 206 WEST MAIN STREET SALISBURY, MARYLAND 21801 410-744-4444 www.gmbnet.com</p>	
GOOD WILL FARM SUSSEX COUNTY, DELAWARE	
KEY SHEET - EXISTING CONDITIONS	
SCALE: 1" = 150'	SHEET NO.
DESIGN BY: JAC	PSP-2.0
DRAWN BY: RLM	
CHECKED BY:	
DWG FILE: 180157	
DATE: JAN 2019	
© COPYRIGHT 2019 GEORGE, MILES & BUHR, LLC	

C:\Projects\2018\180157 - New Farm Subdivision\Drawings\Working Set\Plan\PS-2 - EXISTING CONDITIONS.dwg, 1/11/2019 10:41 AM, Lenox Myrick
 PLOT DATE: 1/11/2019 10:41 AM
 PLOT SCALE: 1" = 100'
 PLOT SHEET: 1 OF 1
 PLOT TITLE: PS-2 - EXISTING CONDITIONS
 PLOT USER: JAC
 PLOT PLOTTER: HP DesignJet T1200

LEGEND

- EXISTING/PROPOSED OTHER PHASES**
- PROPERTY LINE/RIGHT OF WAY
 - CONTOUR
 - PROJECT BOUNDARY
 - ▭ MONTHAL WETLANDS UNDER CORPS JURISDICTION
 - ▭ MONTHAL WATERS UNDER CORPS JURISDICTION
 - ▭ PAVED ROAD
 - 8" SANITARY SEWER, MANHOLE, AND CLEANOUT
 - 15" STORM DRAIN, INLET, AND MANHOLE
 - ▭ FLOOD ZONE
 - WATER MAIN
 - FORCE MAIN



PRINTS ISSUED FOR:
DRAWINGS STAGE

NO.	REVISIONS	DATE

LAND PLANNING, LLC
 1000 S. OCEAN BLVD., SUITE 202
 TAGGART PROFESSIONAL CENTER, DELAWARE 19802
 BETHANY BEACH, DELAWARE 19802
 PHONE: (302) 539-2366

GMB
 GEORGE, MILES & BUHR, LLC
 ARCHITECTS & ENGINEERS
 SALISBURY, MARYLAND 21801
 206 WEST MAIN STREET
 SALISBURY, MARYLAND 21801
 410-742-3110 FAX: 410-742-3176
 www.gmbnet.com

GOOD WILL FARM
 SUSSEX COUNTY, DELAWARE

EXISTING CONDITIONS

SCALE: 1" = 100' DESIGN BY: JAC DRAWN BY: RLM CHECKED BY: PLOT DATE: 1/11/2019 PLOT TITLE: PS-2 - EXISTING CONDITIONS PLOT USER: JAC PLOT PLOTTER: HP DesignJet T1200	SHEET NO. PSP-2.1
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© COPYRIGHT 2019 GEORGE, MILES & BUHR, LLC

PRINTS ISSUED FOR:
DRAWINGS STAGE

DATE

REVISIONS

NO.

PREPARED BY:



LAND PLANNING, LLC
3288 S COASTAL HWY SUITE 202
BETHANY BEACH, MD 20758
PHONE: (302) 532-2356

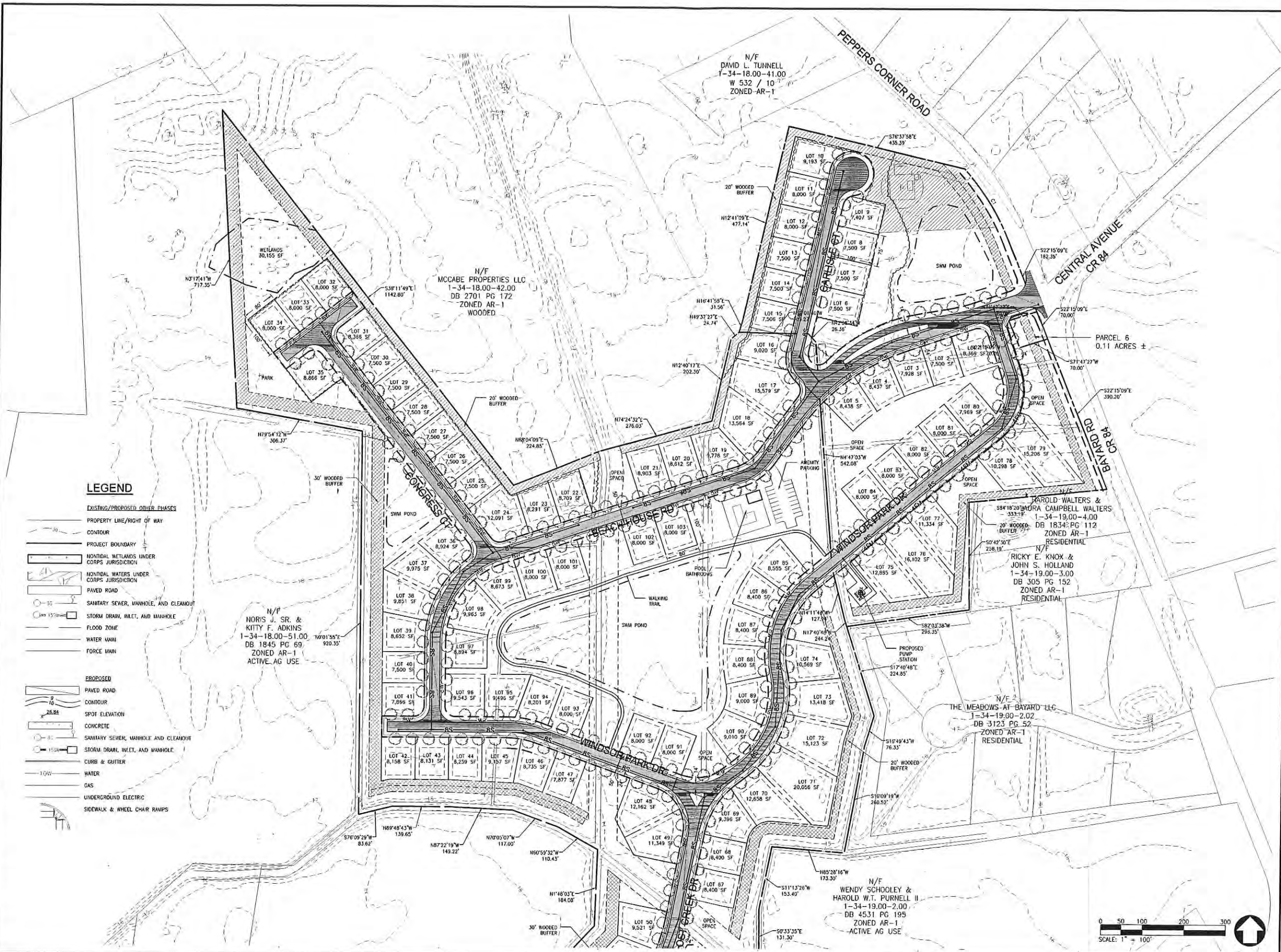
GMB

GEORGE, MILLS & BUHR, LLC
ARCHITECTS & ENGINEERS
BALDWIN - BALTIMORE - SEAFORD
206 WEST MAIN STREET
SALISBURY, MARYLAND 21801
410-752-5555
www.gmbna.com

GOOD WILL FARM
SUSSEX COUNTY, DELAWARE

PROPOSED SITE PLAN

SCALE: 1" = 100'
SHEET NO. PSP-3.1
DESIGN BY: JAC
DRAWN BY: RELM
CHECKED BY:
DATE: JAN 2019
© COPYRIGHT 2019 GEORGE, MILLS & BUHR, LLC



LEGEND

EXISTING/PROPOSED OTHER PHASES

- PROPERTY LINE/RIGHT OF WAY
- CONTOUR
- PROJECT BOUNDARY
- NONTIDAL WETLANDS UNDER CORPS JURISDICTION
- NONTIDAL WATERS UNDER CORPS JURISDICTION
- PAVED ROAD
- SANITARY SEWER, MANHOLE, AND CLEANOUT
- STORM DRAIN, INLET, AND MANHOLE
- FLOOD ZONE
- WATER MAIN
- FORCE MAIN

PROPOSED

- PAVED ROAD
- CONTOUR
- SPOT ELEVATION
- CONCRETE
- SANITARY SEWER, MANHOLE AND CLEANOUT
- STORM DRAIN, INLET, AND MANHOLE
- CURB & GUTTER
- WATER
- GAS
- UNDERGROUND ELECTRIC
- SIDEWALK & WHEEL CHAIR RAMPS

©/Project 2019/10/15/10:55 AM - Run Submittal/Drawings/Working Set/Primary Site Plan/PSP-3 Proposed Site Plan/1/1/2019 10:42 AM - User: jmc
 PLOT: 302
 FILE: PSP-3.dwg
 DATE PLOTTED: 1/10/19 10:42 AM
 PLOT SCALE: 1" = 100'
 PLOT SHEET: 3 OF 3



Landscape Architecture
New Urbanism Design
Land Use Planning/Permitting
Community Design
Prime Consultant – Project Management

Jamie Whitehouse, Planner III
Sussex County Planning & Zoning Department
County Administrative Offices, 2 The Circle
Georgetown, DE 19947

January 14, 2019

**Re: Good Will Farm
Proposed Major Cluster Subdivision 2018-24
Tax Parcels 134-18.00-55.00, 134-19.00-5.00 & 6.00**

Jamie,

Land Tech Land Planning, LLC represents the owner/developer of the above referenced tract of land seeking approval for a proposed cluster option major subdivision. Enclosed please find seven (7) copies of a Design Summary and Supplemental Data book prepared by our firm. Also enclosed, please find one (1) full sized and seven (7) 11"x17" copies of the Preliminary Site Plan as revised to address Technical Advisory Committee (TAC) comments and those of other involved regulatory agencies.

We look forward to presenting this application at the scheduled meeting of the Sussex County Planning and Zoning Commission on Thursday January 24, 2019. As always, if should have questions regarding any aspect of this application, please do not hesitate to contact our office accordingly.

Sincerely,
Land Tech Land Planning, LLC

Jeffrey A. Clark, RLA
jeffc@landtechllc.com

file: goodwillfarmpresubdivapp.ltr
enclosures: noted
cc: Mr. Robert Harris with enclosures.

Good Will Farm

Proposed AR-1 Agricultural Residential Cluster Option Subdivision

Tax Parcels 1-34-18.00-55.00 and 134-19.00-5.00 & 6.00

SUBDIVISION 2018 - 24

DESIGN SUMMARY AND SUPPLEMENTAL DATA

January 10, 2019

COMMUNITY DEVELOPED BY

Gulfstream Development, LLC

27 Atlantic Avenue, Suite 101
Ocean View, DE 19970

(302) 539-6178

Consulting Team

Landscape Architecture

LAND TECH LAND PLANNING, LLC
32895 SOUTH COASTAL HIGHWAY - SUITE 202
BETHANY BEACH, DELAWARE, 19930
302-539-2366

Environmental Sciences

WATERSHED ECO, LLC
JAMES C. McCULLEY IV, PWS (#000471)
P. O. BOX 1225
MIDDLETOWN, DELAWARE 19709
302-464-0831

Land Surveying

TRUE NORTH LAND SURVEYING, INC.
118 ATLANTIC AVENUE, SUITE 202
OCEAN VIEW, DELAWARE 19970
302-539-2488

Traffic Engineering

THE TRAFFIC GROUP, INC.
104 KENWOOD COURT
BERLIN, MARYLAND 21236
443-290-4060

Civil Engineering

GEORGE, MILES & BUHR
206 WEST MAIN STREET
SALISBURY, MARYLAND 21801
410-742-3115

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 - FEMA MAPPING
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 - RARE, THREATENED AND ENDANGERED SPECIES REPORT
 - ENVIRONMENTAL SITE ASSESSMENT
4. PROPOSED LAND USE - PRELIMINARY SITE PLAN
5. PRELIMINARY LAND USE SERVICE (PLUS) RESPONSE
6. TRAFFIC IMPACT STUDY & SUPPLEMENTAL DATA
7. TAX DITCH - PROPOSED COURT ORDER CHANGES
8. ENVIRONMENTAL ASSESSMENT & PUBLIC EVALUATION REPORT
9. SUBDIVISION CONSIDERATIONS (Chapter 99-9)
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11. MAPPING AND ADDRESSING NAMES APPROVAL
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DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

**SUBDIVISION
APPLICATION**



Landscape Architecture
New Urbanism Design
Land Use Planning/Permitting
Community Design
Prime Consultant – Project Management

Jamie Whitehouse, Planner III
Sussex County Planning & Zoning Department
County Administrative Offices, 2 The Circle
Georgetown, DE 19947

September 10, 2018

**Re: Willow Run - Proposed Major Cluster Subdivision Application
Tax Parcels 134-18.00-55.00, 134-19.00-5.00 & 6.00**

Jamie,

Land Tech Land Planning, LLC represents the owners/developer of the above referenced tracts of land seeking approval for a proposed cluster option major subdivision. Enclosed please find the preliminary plat application which includes the following:

1. Completed, dated and signed Major Subdivision Application form.
2. Mailing List Application Forms (Zduriencik and Gusky)
3. Application fee in the amount of \$ 500.00 with check made payable to Sussex County Council.
4. Fifteen (15) full sized copies of the Preliminary Plat (sheets 1 of 4 through 4 of 4) of the proposed subdivision.
5. Copy of August 20, 2018 PLUS agency comments.
6. Copy of Service Level Evaluation Request Form and DeIDOT response.

A preliminary conference was conducted with you in your office on August 15, 2018 to review the proposed cluster subdivision land use plan. Comments received at the preliminary conference have been incorporated into the enclosed preliminary plat. A complete PDF copy of this application will also be forwarded to your email address.

Please process this application for TAC review and subsequent consideration by the Sussex County Planning and Zoning Commission. If this application is not found to be complete for some reason, please contact me. As always, if you should have questions regarding any aspect of this project, please do not hesitate to contact our office.

Sincerely,
Land Tech Land Planning, LLC

Jeffrey A. Clark, RLA
jeffc@landtechllc.com

file: willowrunpresubdivapp.ltr
enclosures: noted
cc: Mr. Robert J. Harris with enclosures.

Sussex County Major Subdivision Application

Sussex County, Delaware

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

Type of Application: (please check applicable)

Standard:

Cluster:

ESDDOZ:

Location of Subdivision:

South of Ocean View situated on Bayard Road at the intersection of Peppers Corner Road and Central Avenue.

Proposed Name of Subdivision:

Willow Run

Tax Map #: 134-18.00-55.00 & 134-19.00-5.00 and 6.00 **Total Acreage:** 56.41 acres

Zoning: AR-1 **Density:** 1.8/ac **Minimum Lot Size:** 7,500 **Number of Lots:** 104

Open Space Acres: 27.67 acres (+/- 49%)

Water Provider: Tidewater Utilities, Inc. **Sewer Provider:** Sussex County

Applicant Information

Applicant Name: Gulfstream Development, LLC

Applicant Address: 27 Atlantic Avenue, Suite 101

City: Ocean View **State:** DE **ZipCode:** 19970

Phone #: (302) 539-6178 **E-mail:** rjh@gulfstream.net

Owner Information

Owner Name: Multiple Land Owners - See Attached

Owner Address: _____

City: _____ **State:** _____ **Zip Code:** _____

Phone #: _____ **E-mail:** _____

Agent/Attorney/Engineer Information

Landscape Architect

Agent/Attorney/Engineer Name: Land Tech Land Planning, LLC (Jeffrey Clark, RLA # DE148)

Agent/Attorney/Engineer Address: 32895 South Coastal Highway; Taggart Professional Center, Suite 202

City: Bethany Beach **State:** DE **Zip Code:** 19930

Phone #: (302) 539-2366 **E-mail:** jeffc@landtechllc.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.

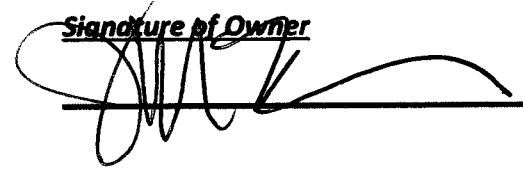
I also certify that I or an agent on my behalf shall attend all public hearing before the Planning and Zoning Commission and any other hearing necessary for this application and that I will answer any questions to the best of my ability to respond to the present and future needs, the health, safety,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

Signature of Applicant/Agent/Attorney



Date: 9/10/18

Signature of Owner



Date: 9-10-2018

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: _____

Mailing List Application Form

For Applications requiring a Public Hearing in Sussex County

Please fill out this form and return it with your application. As a part of your application a Public Hearing is required. The property owners within 200' of the site of the application will be notified. Staff will notify the property owners.

Application Information:

Site Address: Bayard Road

Frankford, DE 19945

Parcel #: 134-18.00-55.00

Site Address: _____

Parcel #: _____

Applicant Name: Gulfstream Development, LLC

Owner Name: Joseph M. and Karen M. Zduriencik

Type of Application:

Conditional Use:

Change of Zone:

Subdivision:

Board of Adjustment:

Date Submitted: 9/10/18

For office use only:

Date of Public Hearing: _____

File #: _____

Date list created: _____

List created by: _____

Date letters mailed: _____

Letters sent by: _____

Mailing List Application Form

For Applications requiring a Public Hearing in Sussex County

Please fill out this form and return it with your application. As a part of your application a Public Hearing is required. The property owners within 200' of the site of the application will be notified. Staff will notify the property owners.

Application Information:

Site Address: 34672 Bayard Road

Frankford, DE 19945

Parcel #: 134-19.00-6.00

Site Address: 34966 Bayard Road

Frankford, DE 19945

Parcel #: 134-19.00-5.00

Applicant Name: Gulfstream Development, LLC

Owner Name: Joel Daniel Gusky

Type of Application:

Conditional Use:

Change of Zone:

Subdivision:

Board of Adjustment:

Date Submitted: 9/10/18

For office use only:

Date of Public Hearing: _____

File #: _____

Date list created: _____

List created by: _____

Date letters mailed: _____

Letters sent by: _____

Attachment

Sussex County Major Subdivision Application

Willow Run Cluster Subdivision

Owner Information:

Joseph and Karen Zduriencik

37671 Lake Ridge Drive

Selbyville, DE 19975

Parcel 134-17.00-55.00

Joel Daniel Gusky

36826 Jahnigen Drive

Frankford, DE 19945

Parcels 134-19.00-5.00 & 6.00



GULFSTREAM DEVELOPMENT LLC

27 ATLANTIC AVENUE
OCEAN VIEW, DE 19970
302-539-6178

M&T
MILLVILLE, DE 19967

1930

62-9/311

9/10/18

PAY TO THE
ORDER OF

*Sussex County
Five hundred*

\$ 500.⁰⁰

DOLLARS

[Handwritten Signature]

AUTHORIZED SIGNATURE

MEMO:



⑈001930⑈ ⑆031100092⑆ 3007 6680⑈

GULFSTREAM DEVELOPMENT LLC

1930

PLANNING & ZONING

JANELLE M. CORNWELL, AICP
DIRECTOR

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



Sussex County

DELAWARE
sussexcountyde.gov

Service Level Evaluation Request Form

This form **shall** be submitted to the Planning and Zoning Office and a response **shall** be received back from DelDOT prior to the applicant being able to submit an application to the Planning and Zoning Office.

Date: 8/13/18

Site Information:

Site Address/Location: 34966 Bayard Road; Frankford, DE 19945

Tax Parcel Number: 134-18.00-55.00 and 134-19.00-5.00 & 6.00

Current Zoning: AR-1

Proposed Zoning: AR-1

Land Use Classification: AR-1 Cluster Subdivision

Proposed Use(s): Single family dwelling lots with min. 7,500
sf each on 56.41 acres

Square footage of any proposed buildings or number of units: One hundred (100) lots

Applicant Information:

Applicant's Name: Gulfstream Development, LLC

Applicant's Address: 27 Atlantic Avenue, Suite 101

City: Ocean View State: DE Zip Code: 19970

Applicant's Phone Number: (302) 539-6178

Applicant's e-mail address: rjh@gulfstreamde.net





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

JENNIFER COHAN
SECRETARY

September 4, 2018

Ms. Janelle Cornwell, Director
Sussex County Planning & Zoning
P.O. Box 417
Georgetown, DE 19947

Dear Ms. Cornwell:

The Department has completed its review of a Service Level Evaluation Request for the **Gulfstream Development, LLC** conditional use application, which we received on August 14, 2018. This application is for a 56.61-acre assemblage of parcels (Tax Parcels: 134-18.00-55.00, 134-19.00-5.00 & 6.00). The subject land is located on the west side of Peppers Corner Road (Sussex Road 365) and Bayard Avenue (Sussex Road 84), opposite Central Avenue (Sussex Road 84). The subject land is currently zoned as AR-1 (Agricultural Residential), and the applicant is seeking a conditional use approval to development 100 single-family detached houses.

Per the 2017 Delaware Vehicle Volume Summary, the annual average daily traffic volume along Peppers Corner Road where the subject land is located, which is from Bayard Road (Sussex Road 84) to Beaver Dam Road, is 1,790 vehicles per day. As the subject land also has frontage along Bayard Road, the annual average daily traffic along that road segment, which is from Daisey Road (Sussex Road 370) to Peppers Corner Road, is 5,805 vehicles per day.

Based on our review, we estimate that the proposed land use will generate more than 50 vehicle trips per a weekly peak hour or 500 vehicle trips per day, and would be considered to have a Minor impact to the local area roadways. In this instance, the Department considers a Minor impact to be when a proposed land use would generate more than either 50 vehicle trips per a weekly peak hour and / or 500 vehicle trips per day but less than 200 vehicle trips per a weekly peak hour and 2,000 vehicle trips per day. Because of this impact, we recommend that the applicant be required to perform a Traffic Impact Study (TIS) for the subject application. However, our Development Coordination Manual provides that where a TIS is required only because the volume warrants are met, and the projected trip generation will be less than 200 vehicle trips per a weekly peak hour and less than 2,000 vehicle trips per day, DelDOT may permit the developer to pay an Area-Wide Study Fee of \$10 per daily trip in lieu of doing a TIS. For this application, if the County were agreeable, we would permit the developer to pay an Area-wide Study Fee.



Ms. Janelle M. Cornwell

Page 2 of 2

September 4, 2018

According to the Institute of Transportation Engineers (ITE) Trip Generation Manual, a development of 100 single-family detached houses would generate 1,040 vehicle trips per day, 76 vehicle trips during the morning peak hour, and 102 vehicle trips during the afternoon peak hour. As stated above, because this development would generate fewer than 2,000 vehicle trips per day and fewer than 200 vehicle trips during a weekly peak hour, the applicant has the option to pay the Area-Wide Study Fee in lieu of doing a TIS. The Area-Wide Study Fee for the proposed development would be \$10,400.00. Payment of the Area-Wide Study Fee does not relieve a developer from having to make or participate in off-site improvements.

On August 20, 2018, DelDOT met with the applicant for a TIS scoping meeting during which the applicant chose the option of conducting a TIS for the proposed development. DelDOT issued a TIS scope of work on August 29, 2018. A copy of the scope of work is enclosed with this letter.

Please contact Mr. Claudy Joinville, at (302) 760-2124, if you have questions concerning this correspondence.

Sincerely,



T. William Brockenbrough, Jr.
County Coordinator
Development Coordination

TWB:cjm

Enclosure

cc: Constance C. Holland, Coordinator, Cabinet Committee on State Planning Issues
Gulfstream Development, LLC, Applicant
J. Marc Coté, Assistant Director, Development Coordination
Gemez Norwood, South District Public Works Manager, Maintenance and Operations
Steven Sisson, Sussex County Subdivision Coordinator, Development Coordination
Derek Sapp, Subdivision Manager, Development Coordination
Brian Yates, Subdivision Manager, Development Coordination
Susanne Laws, Subdivision Manager, Development Coordination
Troy Brestel, Project Engineer, Development Coordination
Claudy Joinville, Project Engineer, Development Coordination

Sussex County, DE
Treasury
P.O. Box 601
Georgetown, DE 19947
Welcome

33012849-0038 Jody B. 09/11/2018 09:15AM

PERMITS / INSPECTIONS

SUBDIVISION - FEE
2018 Item: 201809588|Z005 500.00

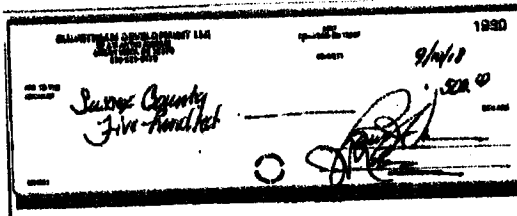
500.00

Subtotal 500.00
Total 500.00

CHECK 500.00
Check Number 001930

Change due 0.00

Paid by: GULF STREAM DEV



Thank you for your payment

CUSTOMER COPY

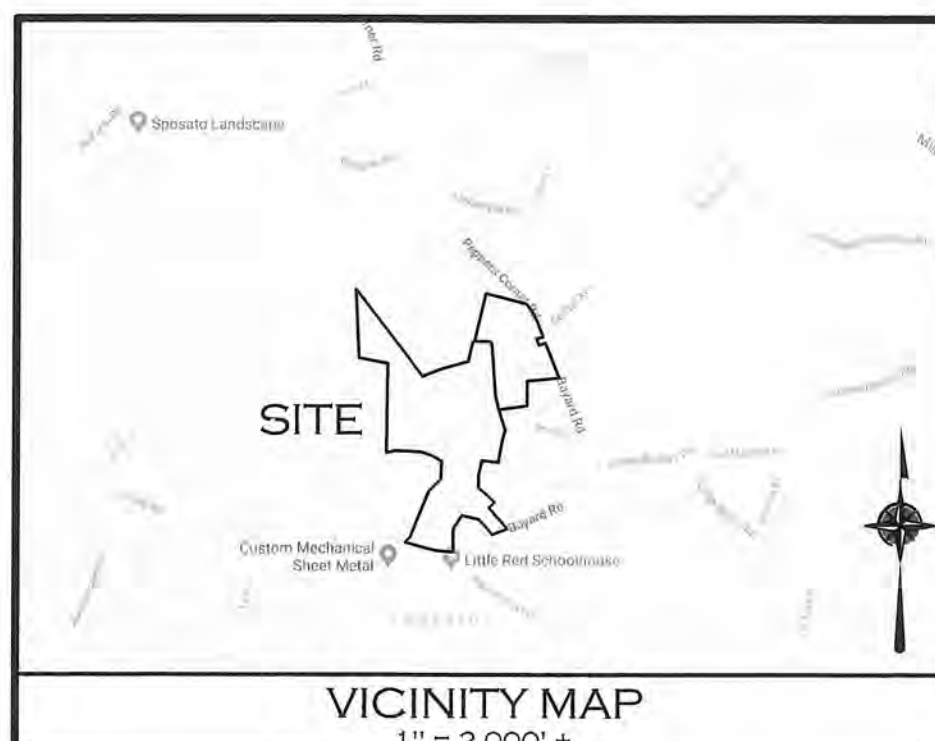
DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

EXISTING SITE DATA

-

**BOUNDARY SURVEY
WETLANDS REPORT
FEMA MAPPING**



WETLAND AREA 'A' LINE TABLE

LINE	BEARING	DISTANCE
A1	N 52°12'35" E	60.09'
A2	S 86°14'22" E	152.62'
A3	S 76°57'50" E	113.02'
A4	S 38°11'48" E	56.97'
A5	S 45°27'55" W	83.91'
A6	S 66°39'36" W	49.71'
A7	S 41°54'41" W	62.09'
A8	N 76°02'31" W	77.60'
A9	N 64°34'06" W	41.15'
A10	N 03°17'41" W	105.80'

WETLAND AREA 'B' LINE TABLE

LINE	BEARING	DISTANCE
B1	N 85°21'17" W	97.22'
B2	N 07°22'14" W	63.48'
B3	N 36°50'33" E	51.27'
B4	N 47°51'02" E	45.14'
B5	S 87°13'36" E	41.51'
B6	S 01°09'46" E	126.10'

PROPERTY LINE TABLE

LINE	BEARING	DISTANCE
L1	S 71°47'27" W	70.00'
L2	S 22°15'09" E	70.00'
L3	N 71°47'27" E	70.00'
L4	S 22°15'09" E	70.00'

BOUNDARY SURVEY PLAN

FOR
GOOD WILL FARM

BAYARD ROAD, FRANKFORD, DE. 19945

TAX MAP # 1-34 - 18.00 - 35.00
1-34 - 19.00 - 34.4

STATE DELAWARE
COUNTY SUSSEX
HUNDRED BALTIMORE
TOWN ---
AREA 13.72 ± ACRES
DEED REF. 4568 / 304
PLAT REF. ---
DRAWN BY CJP
DATE 07 / 27 / 18
SCALE 1" = 50'
SURVEY # DE - 03442

TRUE NORTH

LAND SURVEYING
118 ATLANTIC AVENUE, SUITE 202
OCEAN VIEW, DE. 19970
DE. 302-538-2468
MD. 410-430-2082

LAND SURVEYOR CERTIFICATION

I, BRADLEY A. ABSHER, HEREBY CERTIFY THAT I AM A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF DELAWARE. THAT THE INFORMATION SHOWN HEREON WAS PREPARED UNDER MY SUPERVISION, AND IN MY BEST KNOWLEDGE AND BELIEF REPRESENTS GOOD SURVEYING PRACTICE AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.

Bradley A. Absher
BRADLEY A. ABSHER DATE 01-03-19
PROFESSIONAL LAND SURVEYOR #735

WETLAND CERTIFICATION

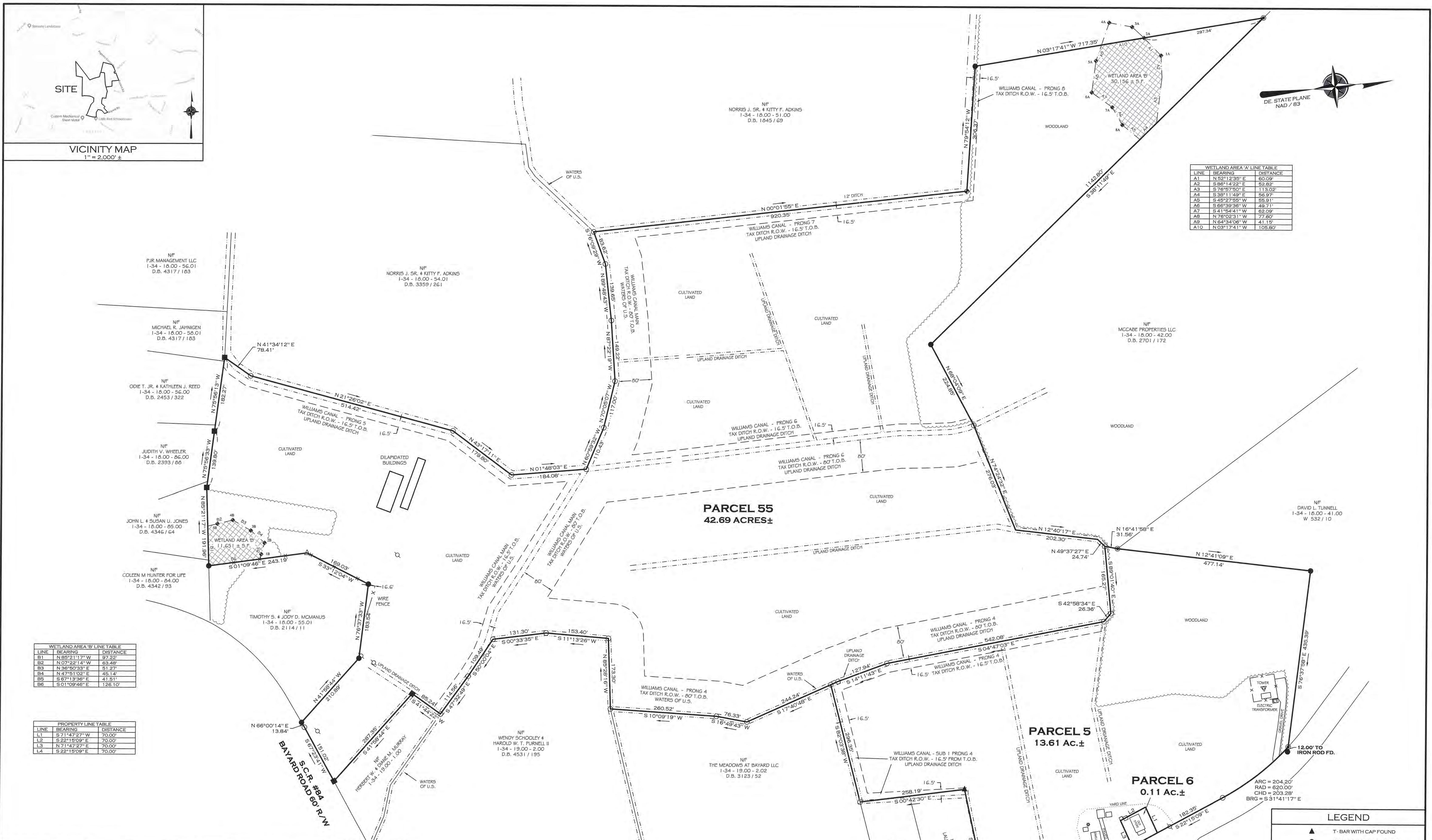
THIS SITE HAS BEEN EXAMINED BY WATERSHED ECO LLC AND THE WATERS OF THE UNITED STATES, INCLUDING WETLANDS, IDENTIFIED ON THE SITE ARE SHOWN ON THIS PLAN AND DESCRIBED IN THE REPORT PREPARED BY WATERSHED ECO LLC.

James O'Malley IV
JAMES O'MALLEY IV DATE 10/21/18
PWS#0004711

LEGEND

- ▲ T-BAR WITH CAP FOUND
- IRON PIPE OR ROD FOUND
- ⊕ PLASTIC PVC PIPE FOUND
- ⊙ FENCE POST FOUND
- ⊗ IRON ROD & CAP TO BE SET
- POINT
- ⊕ UTILITY POLE
- ⊙ LIGHT POLE
- - - DITCH LINE

0' 100' 200' 300'



NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations (BFEs)** and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations tables in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations tables should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was State Plane Delaware zone (FIPSZONE 0700). The **horizontal datum** was NAD 83, GRS80 spheroid. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of information shown on this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov> or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSM-C-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit its website at <http://www.ngs.noaa.gov>.

Base map information shown on this FIRM was provided in digital format by Delaware Geospatial Data Exchange. The base map features were compiled at a scale of 1:24,000 from aerial photography dated 2011.

This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

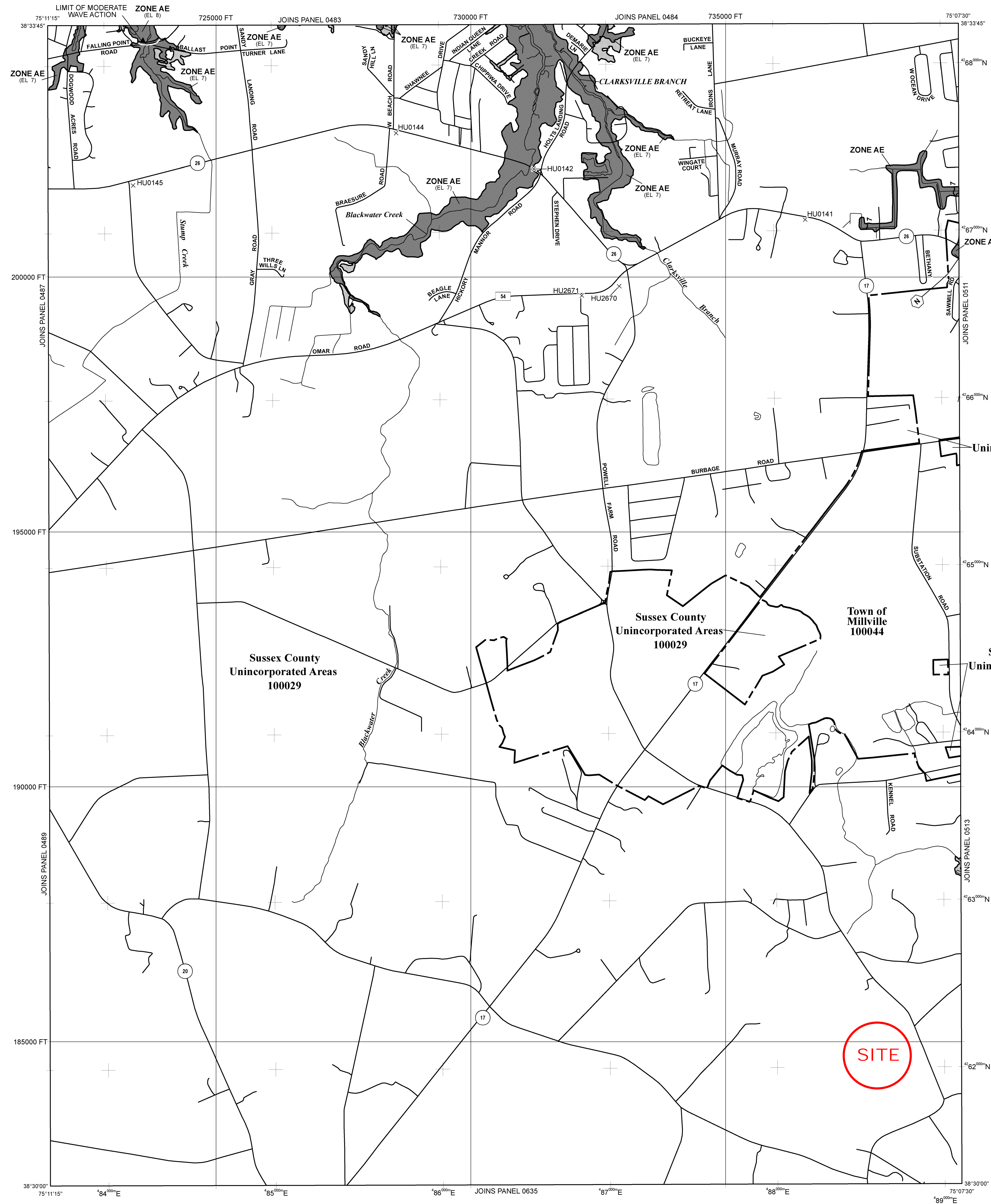
Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels, community map repository addresses; and a listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

The AE Zone category has been divided by a **Limit of Moderate Wave Action (LIMWA)**. The LIMWA represents the approximate landward limit of the 1.5-foot breaking wave. The effects of wave hazards between the VE Zone and the LIMWA (or between the shoreline and the LIMWA for areas where VE Zones are not identified) will be similar to, but less severe than those in the VE Zone.

Contact the **FEMA Map Information eXchange** at 1-877-336-2627 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Information eXchange may also be reached by Fax at 1-800-358-9620 and their website at <http://www.msc.fema.gov/>.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call **1-877-FEMA MAP** (1-877-336-2627) or visit the FEMA website at <http://www.fema.gov/business/nfp>.



LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

- ZONE A** No Base Flood Elevations determined.
- ZONE AE** Base Flood Elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE AR** Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- ZONE A99** Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE V** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

- ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile, and areas protected by levees from 1% annual chance flood.
- ZONE D** Areas in which flood hazards are undetermined, but possible.

OTHER AREAS

- ZONE X** Areas determined to be outside the 0.2% annual chance floodplain.
- ZONE D** Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- Floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- Limit of Moderate Wave Action
- Base Flood Elevation line and value; elevation in feet* (EL 987)
- Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the North American Vertical Datum of 1988

- △ Cross section line
- Transsect line
- 87°07'45", 32°22'30" Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere
- 76°00'N 1000-meter Universal Transverse Mercator grid values, zone 18N
- 600000 FT 5000-foot grid values: Delaware State Plane coordinate system (FIPSZONE 0700), Transverse Mercator projection
- DX5510 x Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 River Mile

MAP REPOSITORY
Refer to listing of Map Repositories on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
June 16, 1995

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
See Notice to Users Page in FIS Report

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 1000'

500 0 1000 2000 FEET
300 0 300 600 METERS

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0495K

FIRM
FLOOD INSURANCE RATE MAP

SUSSEX COUNTY, DELAWARE AND INCORPORATED AREAS

PANEL 495 OF 660
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
MILLVILLE, TOWN OF SUSSEX COUNTY	100044	0495	K
	100029	0495	K

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
10005C0495K

MAP REVISED
MARCH 16, 2015

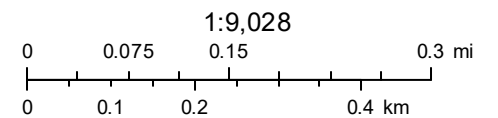
Federal Emergency Management Agency

Delaware Tax Ditch Program



April 30, 2018

- | | | |
|---------------------------|------------------------|----------------------------|
| Public State Parcels | Pond Feature | Approx. Watershed Boundary |
| Tax Ditch Segments | Special Access ROW | |
| Tax Ditch Channel | Extent of Right-of-Way | |



DNREC, Division of Watershed Stewardship, Drainage Program,
jhn.inkster@state.de.us

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

**ENVIRONMENTAL
SITE
DATA**

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

ENVIRONMENTAL SITE DATA RARE, THREATENED & ENDANGERED SPECIES REPORT

Watershed Eco, LLC is currently conducting a Rare, Threatened and Endangered (RTE) Species Study of the entire Good Will Farm subdivision site. The fieldwork is complete and no RTE species or habitat was encountered. Since the site is mainly in row crop agriculture, it is not expected that the property would support any RTE species. The Federal database search portion of this study is on hold until the Government Shutdown concludes, but this is just a formality with no anticipated concerns.



Watershedeco

Wetland Delineation — Good Will Farm

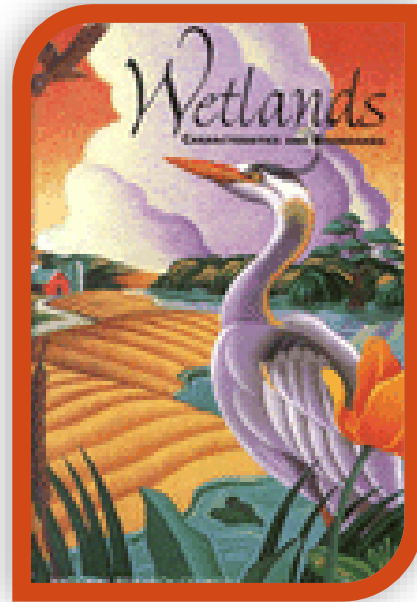


James C. McCulley IV, PWS
Watershed Eco LLC
November 19, 2018
Jim@WatershedEco.com

Introduction

At the request of Land Tech Land Planning, Watershed Eco LLC. has reviewed background materials and conducted site visits to determine the previous and current site conditions related to waters, wetlands and drainage.

James McCulley, the investigator and report author, has 30 years of experience in wetland delineation and permitting. He previously worked as a biologist in the Regulatory Section of the U.S. Army Corps of Engineers, Philadelphia District and was selected as one of 17 wetland scientists nationwide to serve on the National Academy of Sciences, Wetlands Characterization Committee which authored “Wetlands: Characteristics and Boundaries”. He was chosen as one of four committee members to present the committee findings at a press conference on Capitol Hill.



Mr. McCulley is a Professional Wetland Scientist, #000471 as certified by the Society of Wetland Scientists, an international scientific association.

All opinions in this report are to a reasonable degree of scientific certainty.

Executive Summary

Based on the information reviewed and discussed in this report, it was concluded that there were two small isolated wetlands on the site along with Waters of the United States and upland drainage ditches. Waters of the United States were found up to the Ordinary High Water Mark (OHWM) of the Williams Canal Main Tax Ditch which passes through the site and a portion of Prong 4, which forms part of the eastern property boundary. The remaining man-made ditches were found to be upland drainage ditches.

The site conditions at the time of the investigation are detailed in this report.

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Conclusions.....	6
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Definition of Waters and Wetlands

Waters of the United States are defined in 33CFR328.3 and include wetlands as a subset of Waters. Additionally, further guidance has been issued by the U.S. EPA and Corps of Engineers related to the implementation of the definitions referenced above. Discussions of Jurisdiction related to Waters and Wetlands in this report are based on Section 404 of the Clean Water Act and as described in the definitions in this section as well as all guidance currently in effect and based on professional experience.

Additionally, 33CFR328.3(a)(3) states “All other waters such as intrastate lakes, rivers, streams (including intermittent streams) ..., the use, degradation or destruction of which could affect interstate or foreign commerce...”. Additionally, 33CFR328.3(a)(8) states that “Waste treatment systems, including treatment ponds.... are not Waters of the United States”.

Wetlands are defined in 33CFR328.3(b) as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.”

Waters and Wetlands are regulated by the Federal Government under the Clean Water Act and associated guidance and policies. Wetlands are mapped for regulatory purposes using the 1987 Corps of Engineers Wetland Delineation Manual (Technical Report Y-87-1) and the associated regional supplements. In this area, the Atlantic Gulf and Coastal Plain Regional Supplement (ERDC/EL TR-10-20) is utilized.

Waters of the U.S. are mapped by determining the Ordinary High-Water Mark (OHWM) of features with a bed and bank as defined above and in accordance with various guidance as discussed below.

Wetlands are mapped using three criteria: 1. Vegetation, 2. Soils and 3. Hydrology which are further described in the Manual and appropriate Regional Supplement. Hydrophytic (wetland) vegetation is specifically adapted for life in saturated soils and listed by species and indicator status on the National Wetland Plant List maintained by the U.S. Army Corps of Engineers. Hydric (wetland) soils formed under conditions of saturation, flooding or ponding long enough to develop anaerobic conditions and are listed on the United States Department of Agriculture, Hydric Soils Database. Wetland hydrology is described as recurrent, sustained water at or near the surface for extended periods of time.

The current Corps of Engineers and U.S. EPA guidance on Jurisdiction was issued on December 2, 2008 as a result of the U.S. Supreme Court Decision in *Rapanos v. United States and Carabell v. United States*.

Subject Property

The Subject Property for purposes of this study is described as Sussex County Tax Parcels 1-34-18.00-55.00, 1-34-19.00-5 and -6, Bayard Road, Frankford, Delaware 19945, at Latitude and Longitude 38.505568 and -75.131639.

The Subject Parcel is located west of Bayard Road and Peppers Corner Road and north of Daisy Road in Frankford, Delaware. The property consisted mainly of agricultural lands with man-made ditches and an area of woodlands in the north. Williams Canal Tax Ditch bisects the site and appears to be an altered stream, additional man-made ditches drain to the Main Ditch, some of which are designated as Tax Ditch Prongs.

Documents Considered

The following documents were considered as part of this study:

- Current National Wetland Inventory (NWI) Map
- Current USGS Mapping
- Historical Aerial Photos
- NRCS Soils Mapping

Findings

Background Research

The NWI Map (Figure 1) depicts several isolated wetlands in the woodlands on the site.

The USGS Mapping (Figure 2) depicts a flat site drained by ditches.

The 1937 aerial photo (Figure 3) depicts the majority of the site as agricultural area with ditching.

The 1968 aerial photo (Figure 4) depicts similar conditions to 1937.

The 1992 aerial photo (Figure 5) depicts similar conditions to 1968.

The 2002 aerial photo (Figure 6) depicts similar conditions to 1992.

The 2007 aerial photo (Figure 7) depicts similar conditions to 2002 and similar to the current site conditions.

The NRCS Soil Mapping (Figure 8) depicts the site as poorly drained soils on the majority of the site with drainage ditches installed since at least 1937 (see attached).

Wetland and Waters Mapping (Figure 9) depicts two isolated wetland areas and Waters in the main ditch and one prong.

Field Investigation

Watershed Eco LLC., conducted a field delineation on March 27 and June 20, 2018.

These investigations consisted of a visual review of the entire site with special attention paid to vegetative communities and topography.

Vegetation was identified using delineator experience and confirmed using field guides for the following strata:

Trees – woody plants 6 meters or more in height and 7.6 centimeters or larger in diameter at breast height.

Saplings – woody plants 6 meters or more in height and less than 7.6 centimeters in diameter at breast height.

Shrubs – woody plants 1 to 6 meters in height.

Herbs – all herbaceous plants regardless of size and woody plants less than 1 meter in height.

Woody Vines – all woody vines regardless of height.

The indicator status for each dominant species was recorded based on the USACE 2016 Atlantic, Gulf and Coastal Plain Region Plant List.

Soil borings were advanced to an approximate depth of 20 inches using a 3-inch diameter Dutch auger. Soil colors were visually estimated using a Munsell Soil Color Chart and texture was estimated using standard soil texture criteria. Soil characteristics were compared to the Hydric Soil Indicator Guide in order to identify whether hydric soils were present at each data point location.

Wetland hydrology characteristics were visually observed where present based on the USACE Wetland Delineation Manual and Regional Supplement. No additional hydrology studies were performed at the site (ie. Piezometers, Observation Wells or Modeling) and potential wetland hydrology was based on observations on the day of the field investigation and professional experience.

Results

The site was an agricultural field with woodlands in the north and a scrub/shrub area in the south. The agricultural field was bisected with man-made drainage ditches. The main ditch and one prong appeared to be perennial or intermittent and the remainder appeared to be ephemeral.

The upland areas were dominated by:

Ag Field Weeds - Ryegrass, Chickory, Narrow Leaf Plantain, Dandelion, White Clover and Broad Leaf Plantain.

Woodlands – Tulip Poplar, Southern Red Oak, Black Oak, Fox Grape, Poison Ivy, Black Cherry, Shining Sumac, Evening Primrose and Narrow Leaf Plantain.

Wetlands – Red Maple, Sweet Gum, Arrowwood, Soft Rush and Woolgrass.

It was determined that the Williams Canal Main Ditch and apportion of Prong 4 were Waters of the U.S. up to the Ordinary High-Water Mark (OHWM) which was below the top of bank of the ditch.

Conclusions

All opinions are to a reasonable degree of scientific certainty.

Based on the information reviewed and discussed in this report, it was concluded that there were two isolated wetland areas within the study area. Waters of the United States were identified to the OHWM of the Main Branch and a portion of Prong 4.

It is the opinion of Watershed Eco LLC. that Waters under the jurisdiction of the U.S. Army Corps of Engineers are present on the site.

Figures



Figure 1: National Wetland Inventory Map.

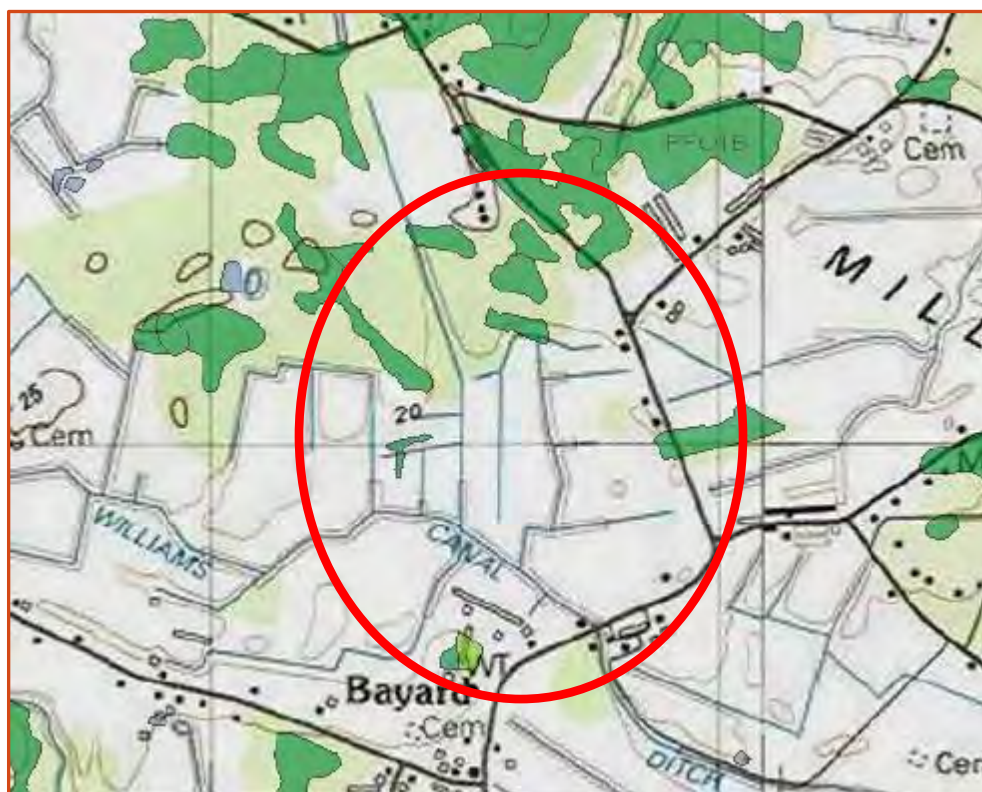


Figure 2: USGS Mapping.





Figure 3: 1937 Aerial Photograph.



Figure 4: 1968 Aerial Photograph.





Figure 5: 1992 Aerial Photograph.



Figure 6: 2002 Aerial Photograph.





Figure 7: 2007 Aerial Photograph.





Figure 8: Soil Map.

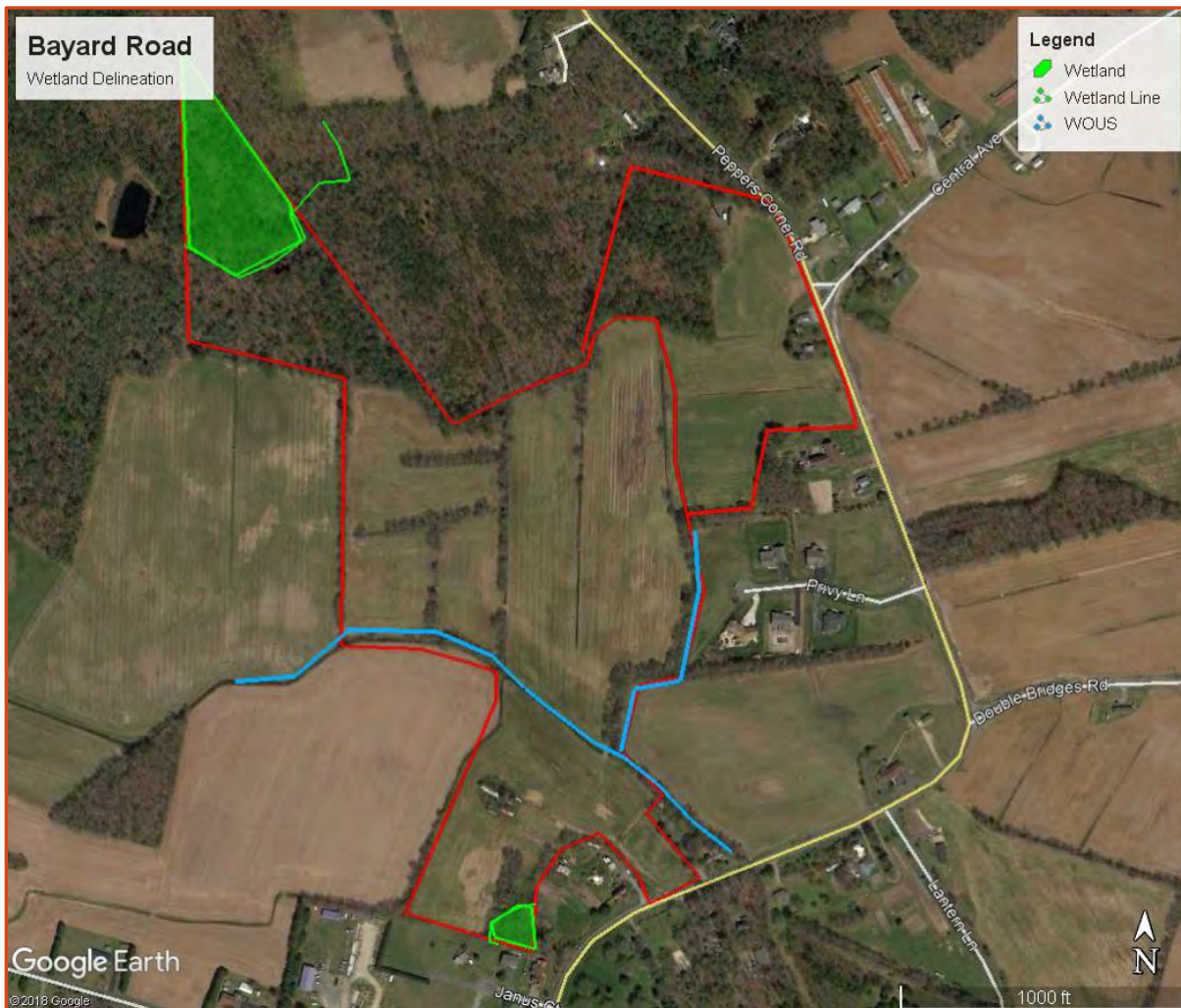


Figure 9: Wetland Delineation



Credentials

James C. McCulley IV

Professional Wetland Scientist, P.W.S. (#000471)

Education:

- B.A. Biology, Rutgers University
- M.S. Biology, Rutgers University
- Wetland Sedges, Grasses and Rushes, The Swamp School
- Hydric Soils Indicators, The Swamp School
- Wetland Ferns, The Swamp School
- Wetland Delineation, Rutgers Continuing Education
- Wetland Hydrology, Rutgers Continuing Education
- Wetland Regulation, Corps of Engineers Training Program

Topics Presented:

- Presented Wetland Rules, Regulations and Policies, Delaware State Bar
- Presented Wetlands Rules, Regulations and Policies, Pennsylvania State Bar
- Presented Wetland Rules, Regulations and Policies, Maryland Architects
- Presented Environmental Rule Changes, Homebuilders Association of Delaware
- Chaired Panel Discussion at Annual Meeting of Society of Wetland Scientists (SWS)
- Presented on “No Net Loss” at Association of State Wetland Managers Meeting
- Presented on Wetlands Legislation to Environmental Law Institute
- Presented on Wetland Delineation at State Parks Managers Meeting
- Part of Panel to present NAS findings to Congress on Wetlands Legislation
- Treatment of Storm Water Run-Off by Wetlands to SWS Annual Meeting

Committees:

- State of Delaware, Wetlands Advisory Committee
- National Association of Homebuilders, Environmental Issues Committee
- National Association of Homebuilders, Land Use Policy Committee
- Homebuilders Association of Delaware, Life Director
- National Academy of Sciences Wetlands Characterization Committee
- State of Delaware, Freshwater Wetlands Legislation Committee
- New Castle County Comprehensive Plan Update
- New Castle County, Riparian Buffer Ordinance Committee
- Board of Directors, Homebuilders Association of Delaware

Publications:

- Wetlands: Characteristics and Boundaries, National Academy of Sciences Press
- Integrated Natural Resource Management Plan, PAX Naval Air Station

Community:

- Mentored Honors Biology Program at Glasgow High School
- Curriculum Development Committee for Hodgson Vo-Tech (HVT), Environmental Landscape Technology Program
- Graded Senior Projects for HVT, Environmental Program
- Assisted Talley Middle School with Artificial Wetland Creation Project
- Donated Plants for Brader Elementary School, Wetland Creation Project
- Donated Plants for Ohio State University Wetland Creation Project
- Presented Career Opportunities to Sussex Vo-Tech Environmental Program
- Donated Numerous Environmental Studies for Habitat for Humanity Projects

Selected Projects:

Firefly Music Festival – Dover, Delaware

Provided Wetland Delineation, Jurisdictional Determination, Wetland Permitting and Wetland Mitigation Design for the 2012, 2013, 2014 and 2015 festivals. The festival has grown every year and has required increased impacts in wetlands to accommodate the larger crowds and safe access. Permitting was always on a short time frame for this project.

Breakwater Beach – Bethany Beach, Delaware

Provided Wetland Delineation, Jurisdictional Determination and Wetland Permitting. For 30 years the property owner attempted to get approval to build the final eight homes on the beach but couldn't get the Corps of Engineer approvals. Watershed Eco, through creative design implementation, secured approval to construct these homes.

Peninsula – Millsboro, Delaware

Provided Wetland Delineation, Jurisdictional Determination, Wetland Permitting, Wetland Mitigation Design, Submerged Aquatic Vegetation Study, Fisheries Study, Forest Delineation and Assessment, Water Quality Monitoring and Environmental Features Construction Oversight.

The Reserves – Ocean View, Delaware

Provided Wetland Delineation, Jurisdictional Determination, Ditch Characterization, Wetland Permitting, Wetland Mitigation Design and Delmarva Fox Squirrel Habitat Study.

Warrington Property/Oak Creek – Rehoboth, Delaware

Provided Wetland Delineation, Jurisdictional Determination, Successful Appeal of JD for Isolated Wetlands, Revision to State Tidal Mapping and Consultation on Storm Water BMPs.

Shipyard Shops – Wilmington, Delaware

Provided Wetland Delineation, Jurisdictional Determination and Wetland Permitting.

Delaware Outdoor Advertising - Wilmington, Delaware

Provided Violation Resolution with the Corps of Engineers and the State for Billboards along I-95, Design of Wetland Mitigation, Construction Oversight and Wetland Mitigation Monitoring.

Townsend Station – Townsend, Delaware

Provided Violation Resolution with the Corps of Engineers for Illegal Wetland Fills, Design of Restoration and Mitigation Plans, Construction Oversight and Monitoring of Wetland Areas.

State Route 1, Phase II, Scott Run to Smyrna – Delaware

Provided Wetland Delineation, Jurisdictional Determination, Habitat Studies, Wetland Permitting, Wetland Mitigation Design, Construction Oversight, Wetland Mitigation Area Monitoring.

Photographs



Photo 1: Agricultural Field Typical.



Photo 2: Main Branch of Tax Ditch.





Photo 3: Wetlands in the Woodland Area to the North.



Photo 4: Southern Wetland Area.





Photo 5: Ephemeral Upland Drainage Ditch.



Appendices





United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

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

Custom Soil Resource Report for **Sussex County, Delaware**

Bayard Road Property



Preface

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

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

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

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

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

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

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

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scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

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identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

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

Custom Soil Resource Report Soil Map



Map Scale: 1:5,830 if printed on A portrait (8.5" x 11") sheet.

0 50 100 200 300 Meters

0 250 500 1000 1500 Feet

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

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)




















Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features


Water Features

 Streams and Canals

Transportation

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

Background

 Aerial Photography

MAP INFORMATION

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

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

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

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

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

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

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

Soil Survey Area: Sussex County, Delaware
 Survey Area Data: Version 19, Sep 14, 2018

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

Date(s) aerial images were photographed: Dec 31, 2009—Jun 27, 2017

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AsA	Askecksy loamy sand, 0 to 2 percent slopes	0.8	1.2%
HmA	Hammonton loamy sand, 0 to 2 percent slopes	7.9	12.0%
HpA	Henlopen loamy sand, 0 to 2 percent slopes	0.1	0.1%
HuA	Hurlock loamy sand, 0 to 2 percent slopes	10.8	16.5%
HvA	Hurlock sandy loam, 0 to 2 percent slopes	2.5	3.8%
KsA	Klej loamy sand, 0 to 2 percent slopes	0.3	0.5%
MmA	Mullica mucky sandy loam, 0 to 2 percent slopes	6.0	9.1%
MuA	Mullica-Berryland complex, 0 to 2 percent slopes	32.2	49.1%
PpA	Pepperbox loamy sand, 0 to 2 percent slopes	4.7	7.2%
PsA	Pepperbox-Rosedale complex, 0 to 2 percent slopes	0.3	0.4%
Totals for Area of Interest		65.6	100.0%

Map Unit Descriptions

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

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

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties

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

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

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

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

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

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

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

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

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

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

Sussex County, Delaware

AsA—Askecksy loamy sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 1qtfg
Elevation: 0 to 100 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 58 degrees F
Frost-free period: 180 to 220 days
Farmland classification: Not prime farmland

Map Unit Composition

Askecksy, undrained, and similar soils: 45 percent
Askecksy, drained, and similar soils: 30 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Askecksy, Undrained

Setting

Landform: Flats, depressions, swales, drainageways
Landform position (three-dimensional): Talf
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Parent material: Sandy eolian deposits and/or fluviomarine sediments

Typical profile

Oe - 0 to 3 inches: moderately decomposed plant material
A - 3 to 8 inches: loamy sand
Bg - 8 to 21 inches: loamy sand
Cg1 - 21 to 29 inches: sand
Cg2 - 29 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 99.90 in/hr)
Depth to water table: About 0 to 10 inches
Frequency of flooding: None
Frequency of ponding: Occasional
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Low (about 3.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A/D
Hydric soil rating: Yes

Description of Askecksy, Drained

Setting

Landform: Flats, depressions, swales
Landform position (three-dimensional): Talf
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Parent material: Sandy eolian deposits and/or fluviomarine sediments

Typical profile

Ap - 0 to 8 inches: loamy sand
Bg - 8 to 21 inches: loamy sand
Cg1 - 21 to 29 inches: sand
Cg2 - 29 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.38 to 99.90 in/hr)
Depth to water table: About 10 to 20 inches
Frequency of flooding: None
Frequency of ponding: Rare
Available water storage in profile: Very low (about 2.5 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: A/D
Hydric soil rating: Yes

Minor Components

Hurlock, undrained

Percent of map unit: 10 percent
Landform: Flats, swales, depressions
Landform position (three-dimensional): Dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Hydric soil rating: Yes

Klej

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

Galloway

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

Mullica, undrained

Percent of map unit: 5 percent
Landform: Flats, depressions, drainageways, swales
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

HmA—Hammonton loamy sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 1qth0
Elevation: 0 to 140 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 58 degrees F
Frost-free period: 180 to 220 days
Farmland classification: All areas are prime farmland

Map Unit Composition

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

Description of Hammonton

Setting

Landform: Flats, depressions, drainageways
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Parent material: Loamy fluviomarine sediments

Typical profile

Ap - 0 to 11 inches: loamy sand
Bt - 11 to 30 inches: sandy loam
Cg - 30 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 5.3 inches)

Interpretive groups

Land capability classification (irrigated): 2w

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

Minor Components

Hurlock, drained

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

Ingleside

Percent of map unit: 5 percent
Landform: Flats, depressions, fluviomarine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Hydric soil rating: No

Klej

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

Rosedale

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

HpA—Henlopen loamy sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 1qth3
Elevation: 20 to 70 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 58 degrees F
Frost-free period: 180 to 220 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

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

Description of Henlopen

Setting

Landform: Marine terraces, dunes

Down-slope shape: Linear, convex

Across-slope shape: Linear

Parent material: Sandy eolian deposits and loamy fluviomarine sediments

Typical profile

Ap - 0 to 10 inches: loamy sand

E - 10 to 46 inches: loamy sand

Bt - 46 to 62 inches: sandy loam

C - 62 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Somewhat excessively drained

Runoff class: Negligible

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 5.9 inches)

Interpretive groups

Land capability classification (irrigated): 2s

Land capability classification (nonirrigated): 3s

Hydrologic Soil Group: A

Hydric soil rating: No

Minor Components

Runclint

Percent of map unit: 5 percent

Landform: Dunes, knolls, flats

Hydric soil rating: No

Rosedale

Percent of map unit: 5 percent

Landform: Flats, knolls

Hydric soil rating: No

Fort mott

Percent of map unit: 5 percent

Landform: Flats

Hydric soil rating: No

Ingleside

Percent of map unit: 5 percent

Landform: Flats

Hydric soil rating: No

HuA—Hurlock loamy sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 1qth8

Elevation: 0 to 140 feet

Mean annual precipitation: 42 to 48 inches

Mean annual air temperature: 52 to 58 degrees F

Frost-free period: 180 to 220 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Hurlock, undrained, and similar soils: 40 percent

Hurlock, drained, and similar soils: 40 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hurlock, Undrained

Setting

Landform: Depressions, flats, swales

Landform position (three-dimensional): Dip

Down-slope shape: Concave, linear

Across-slope shape: Concave, linear

Parent material: Loamy fluviomarine sediments

Typical profile

Oe - 0 to 3 inches: moderately decomposed plant material

A - 3 to 6 inches: loamy sand

Eg - 6 to 13 inches: sandy loam

Btg - 13 to 25 inches: sandy loam

Cg - 25 to 63 inches: loamy sand

2Cg - 63 to 80 inches: silt loam

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Poorly drained

Runoff class: Negligible

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high
(0.06 to 5.95 in/hr)

Depth to water table: About 0 to 10 inches

Frequency of flooding: None

Frequency of ponding: Occasional

Available water storage in profile: Moderate (about 7.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4w

Hydrologic Soil Group: A/D

Hydric soil rating: Yes

Description of Hurlock, Drained

Setting

Landform: Swales, depressions, flats
Landform position (three-dimensional): Dip
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Parent material: Loamy fluviomarine sediments

Typical profile

Ap - 0 to 10 inches: loamy sand
Eg - 10 to 13 inches: sandy loam
Btg - 13 to 25 inches: sandy loam
Cg - 25 to 63 inches: loamy sand
2Cg - 63 to 80 inches: silt loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high
(0.06 to 5.95 in/hr)
Depth to water table: About 10 to 20 inches
Frequency of flooding: None
Frequency of ponding: Rare
Available water storage in profile: Moderate (about 6.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: A/D
Hydric soil rating: Yes

Minor Components

Klej

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

Galloway

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

Hammonton

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

Glassboro

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

HvA—Hurlock sandy loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 1qth9
Elevation: 0 to 120 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 58 degrees F
Frost-free period: 180 to 220 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Hurlock, drained, and similar soils: 42 percent
Hurlock, undrained, and similar soils: 38 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hurlock, Drained

Setting

Landform: Flats, depressions, swales
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Parent material: Loamy fluviomarine sediments fluviomarine deposits

Typical profile

Ap - 0 to 10 inches: sandy loam
Eg - 10 to 13 inches: sandy loam
Btg - 13 to 25 inches: sandy loam
Cg - 25 to 63 inches: loamy sand
2Cg - 63 to 80 inches: silt loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high
(0.06 to 5.95 in/hr)
Depth to water table: About 10 to 20 inches
Frequency of flooding: None
Frequency of ponding: Rare
Available water storage in profile: Moderate (about 6.7 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: A/D
Hydric soil rating: Yes

Description of Hurlock, Undrained

Setting

Landform: Flats, swales, depressions, drainageways
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Parent material: Loamy fluviomarine sediments fluviomarine deposits

Typical profile

Oe - 0 to 2 inches: moderately decomposed plant material
A - 2 to 4 inches: sandy loam
Eg - 4 to 13 inches: sandy loam
Btg - 13 to 25 inches: sandy loam
Cg - 25 to 63 inches: loamy sand
2Cg - 63 to 80 inches: silt loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high
(0.06 to 5.95 in/hr)
Depth to water table: About 0 to 10 inches
Frequency of flooding: None
Frequency of ponding: Occasional
Available water storage in profile: Moderate (about 7.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: A/D
Hydric soil rating: Yes

Minor Components

Hammonton

Percent of map unit: 5 percent
Landform: Drainageways, flats
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Mullica, drained

Percent of map unit: 5 percent
Landform: Flats, swales, depressions, drainageways
Landform position (three-dimensional): Dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Hydric soil rating: Yes

Woodstown

Percent of map unit: 5 percent
Landform: Flats, broad interstream divides, fluviomarine terraces
Landform position (three-dimensional): Tread, rise
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Klej

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

KsA—Klej loamy sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 1qthw
Elevation: 0 to 200 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 58 degrees F
Frost-free period: 180 to 220 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Klej and similar soils: 70 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Klej

Setting

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

Typical profile

A - 0 to 7 inches: loamy sand
E - 7 to 14 inches: loamy sand
Bw - 14 to 20 inches: loamy sand
C - 20 to 62 inches: loamy sand
Cg - 62 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat poorly drained

Custom Soil Resource Report

Runoff class: Negligible

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to very high (0.57 to 19.98 in/hr)

Depth to water table: About 10 to 20 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 4.4 inches)

Interpretive groups

Land capability classification (irrigated): 3w

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: A/D

Hydric soil rating: No

Minor Components

Galloway

Percent of map unit: 10 percent

Landform: Depressions, flats

Down-slope shape: Concave, linear

Across-slope shape: Concave, linear

Hydric soil rating: No

Berryland, drained

Percent of map unit: 5 percent

Landform: Swales, depressions, flats

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: Yes

Hammonton

Percent of map unit: 5 percent

Landform: Flats, depressions, drainageways

Down-slope shape: Linear, concave

Across-slope shape: Linear, concave

Hydric soil rating: No

Hurlock, drained

Percent of map unit: 5 percent

Landform: Depressions, flats, swales

Landform position (three-dimensional): Dip

Down-slope shape: Concave, linear

Across-slope shape: Concave, linear

Hydric soil rating: Yes

Runclint

Percent of map unit: 5 percent

Landform: Knolls, flats, fluviomarine terraces, dunes

Landform position (three-dimensional): Rise

Down-slope shape: Convex, linear

Across-slope shape: Convex, linear

Hydric soil rating: No

MmA—Mullica mucky sandy loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 1qtj7
Elevation: 30 to 230 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 58 degrees F
Frost-free period: 180 to 220 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Mullica, drained, and similar soils: 50 percent
Mullica, undrained, and similar soils: 30 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mullica, Drained

Setting

Landform: Swales, drainageways, flats, depressions
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave

Typical profile

Ap - 0 to 10 inches: mucky sandy loam
A - 10 to 14 inches: mucky sandy loam
Bg - 14 to 24 inches: sandy loam
Cg - 24 to 65 inches: sand
2Ab - 65 to 80 inches: silt loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 5.95 in/hr)
Depth to water table: About 0 to 10 inches
Frequency of flooding: None
Frequency of ponding: Rare
Available water storage in profile: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: A/D
Hydric soil rating: Yes

Description of Mullica, Undrained

Setting

Landform: Depressions, drainageways, swales, flats

Down-slope shape: Concave, linear

Across-slope shape: Concave, linear

Parent material: Sandy and loamy fluviomarine sediments

Typical profile

Oe - 0 to 3 inches: moderately decomposed plant material

A - 3 to 10 inches: mucky sandy loam

Eg - 10 to 14 inches: sandy loam

Bg - 14 to 24 inches: sandy loam

Cg - 24 to 65 inches: sand

2Ab - 65 to 80 inches: silt loam

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Very poorly drained

Runoff class: Negligible

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 5.95 in/hr)

Depth to water table: About 0 to 10 inches

Frequency of flooding: None

Frequency of ponding: Frequent

Available water storage in profile: Moderate (about 6.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4w

Hydrologic Soil Group: A/D

Hydric soil rating: Yes

Minor Components

Berryland

Percent of map unit: 10 percent

Landform: Flats, depressions, swales

Hydric soil rating: Yes

Hurlock

Percent of map unit: 10 percent

Landform: Flats

Hydric soil rating: Yes

MuA—Mullica-Berryland complex, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 1qtjb

Custom Soil Resource Report

Elevation: 0 to 100 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 58 degrees F
Frost-free period: 180 to 220 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Berryland, drained, and similar soils: 25 percent
Mullica, drained, and similar soils: 25 percent
Berryland, undrained, and similar soils: 15 percent
Mullica, undrained, and similar soils: 15 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Berryland, Drained

Setting

Landform: Swales, flats, depressions
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy eolian deposits and/or fluviomarine sediments

Typical profile

Ap - 0 to 10 inches: mucky loamy sand
A - 10 to 17 inches: loamy sand
Bh - 17 to 24 inches: loamy sand
C - 24 to 70 inches: sand
2Ab - 70 to 80 inches: silt loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)
Depth to water table: About 0 to 10 inches
Frequency of flooding: None
Frequency of ponding: Rare
Available water storage in profile: Low (about 4.4 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: A/D
Hydric soil rating: Yes

Description of Mullica, Drained

Setting

Landform: Depressions, swales, flats
Down-slope shape: Linear
Across-slope shape: Linear

Typical profile

Ap - 0 to 10 inches: mucky sandy loam
A - 10 to 14 inches: mucky sandy loam

Custom Soil Resource Report

Bg - 14 to 24 inches: sandy loam
Cg - 24 to 65 inches: sand
2Ab - 65 to 80 inches: silt loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 5.95 in/hr)
Depth to water table: About 0 to 10 inches
Frequency of flooding: None
Frequency of ponding: Rare
Available water storage in profile: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: A/D
Hydric soil rating: Yes

Description of Berryland, Undrained

Setting

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

Typical profile

Oe - 0 to 2 inches: moderately decomposed plant material
A1 - 2 to 14 inches: mucky loamy sand
A2 - 14 to 17 inches: loamy sand
Bh - 17 to 24 inches: loamy sand
C - 24 to 70 inches: sand
2Ab - 70 to 80 inches: silt loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)
Depth to water table: About 0 to 10 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Available water storage in profile: Low (about 5.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A/D
Hydric soil rating: Yes

Description of Mullica, Undrained

Setting

Landform: Flats, depressions, drainageways, swales
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy and loamy fluviomarine sediments

Typical profile

Oe - 0 to 3 inches: moderately decomposed plant material
A - 3 to 10 inches: mucky sandy loam
Eg - 10 to 14 inches: sandy loam
Bg - 14 to 24 inches: sandy loam
Cg - 24 to 65 inches: sand
2Ab - 65 to 80 inches: silt loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 5.95 in/hr)
Depth to water table: About 0 to 10 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Available water storage in profile: Moderate (about 6.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A/D
Hydric soil rating: Yes

Minor Components

Klej

Percent of map unit: 10 percent
Landform: Flats, depressions
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Hydric soil rating: No

Galloway

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

Askecksy, drained

Percent of map unit: 5 percent
Landform: Flats, depressions, swales
Landform position (three-dimensional): Talf
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Hydric soil rating: Yes

PpA—Pepperbox loamy sand, 0 to 2 percent slopes

Map Unit Setting

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

Map Unit Composition

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

Description of Pepperbox

Setting

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

Typical profile

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

Properties and qualities

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

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 2w

Custom Soil Resource Report

Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Rosedale

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

Rockawalkin

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

Fort mott

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

PsA—Pepperbox-Rosedale complex, 0 to 2 percent slopes

Map Unit Setting

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

Map Unit Composition

Rosedale and similar soils: 45 percent
Pepperbox and similar soils: 45 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rosedale

Setting

Landform: Flats
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy eolian deposits over fluviomarine sediments

Typical profile

A - 0 to 9 inches: loamy sand
E - 9 to 25 inches: loamy sand
Bt - 25 to 38 inches: sandy loam
C - 38 to 68 inches: loamy sand
2Cg - 68 to 80 inches: sandy clay loam

Custom Soil Resource Report

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 5.95 in/hr)
Depth to water table: About 40 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 5.3 inches)

Interpretive groups

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

Description of Pepperbox

Setting

Landform: Flats, depressions
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Parent material: Sandy eolian deposits over fluviomarine sediments

Typical profile

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

Properties and qualities

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

Interpretive groups

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

Minor Components

Rockawalkin

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

Custom Soil Resource Report

Fort mott

Percent of map unit: 5 percent

Landform: Flats, knolls

Landform position (three-dimensional): Rise

Hydric soil rating: No

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Custom Soil Resource Report

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U.S. Fish and Wildlife Service National Wetlands Inventory

Bayard Road

Mar 26, 2017



Wetlands

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

User Remarks:

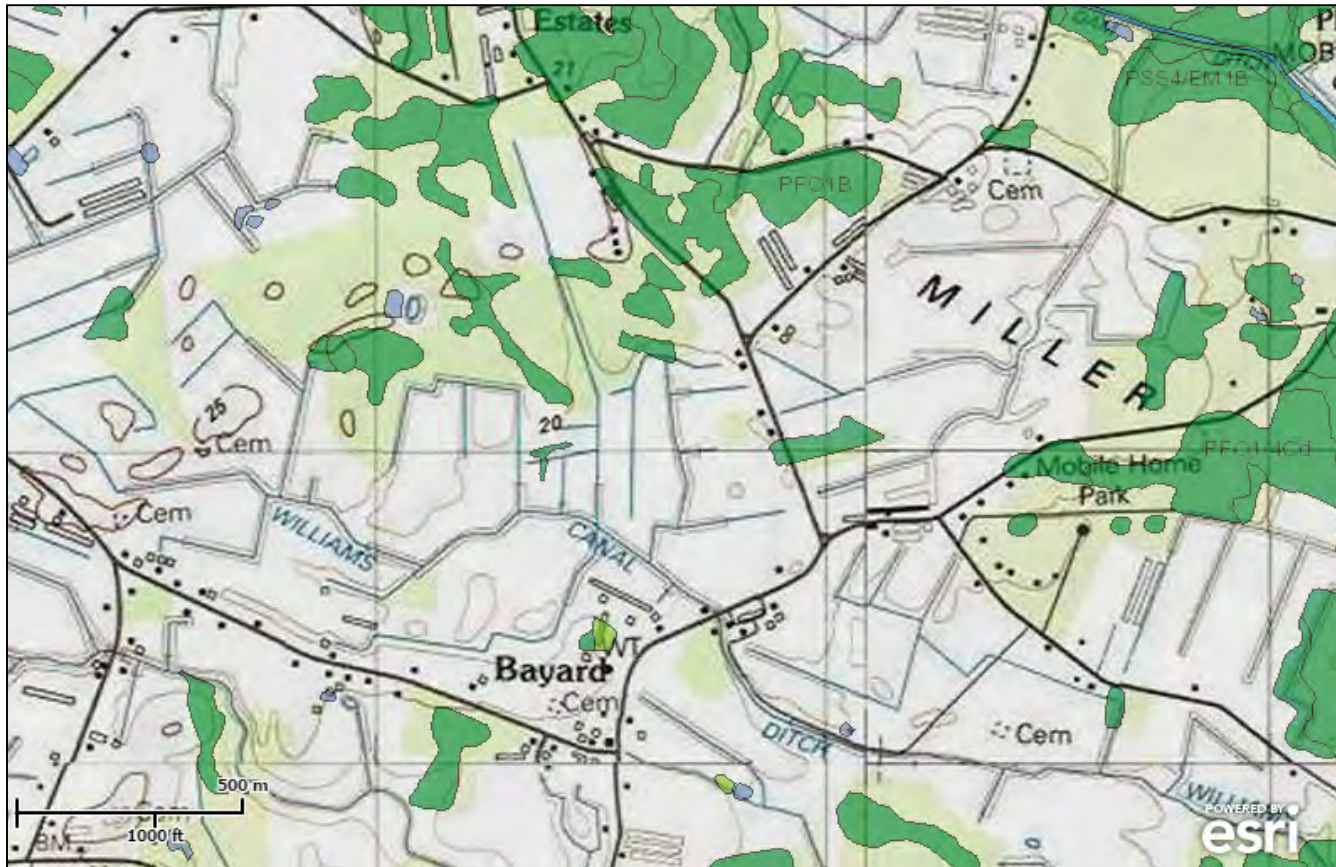
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U.S. Fish and Wildlife Service National Wetlands Inventory

Bayard Road

Mar 26, 2017



Wetlands

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




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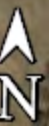
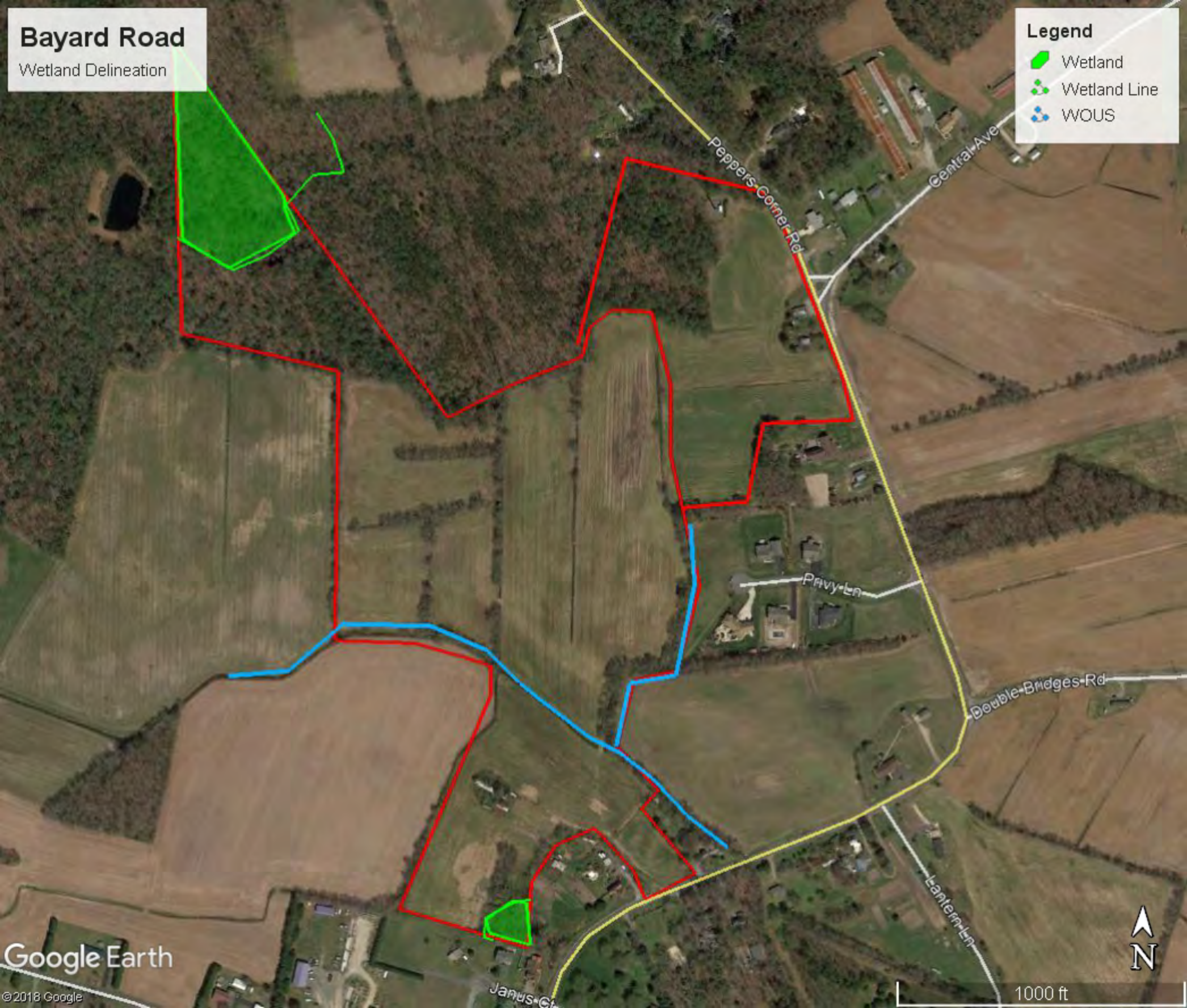
User Remarks:

Bayard Road

Wetland Delineation

Legend

-  Wetland
-  Wetland Line
-  WOUS





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Creating Value

Phase 1 Environmental Site Assessment Report

***Willow Run – Good Will Farm
Bayard Road
Frankford, Delaware 19945***



Prepared for:

Gulfstream Development
27 Atlantic Avenue #101
Ocean View, Delaware 19970

Prepared by

Watershed Eco, LLC
P.O. Box 1225
Middletown, Delaware 19709
Phone: 302-464-0831

November 26, 2018

302-464-0831
Jim@WatershedEco.com

Project Information:

Willow Run – aka Good Will Farm

Site Information:

Bayard Road
Frankford, Delaware 19945
County: Sussex
Latitude, Longitude: 38.505568, -75.131639
Parcel: 1-34-18.00-55.00 and 1-34-19.00-5 and -6
Site Access Contact: Robert Harris

Client Information:

Gulfstream Development
27 Atlantic Avenue #101
Ocean View, Delaware 19970
Attention: Robert Harris



Site Assessor:

James C. McCulley IV
Environmental Scientist

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined by 40CFR312.10

INTRODUCTION:

Purpose – The purpose of this Environmental Site Assessment was to evaluate the current and historical conditions of the Subject Property in an effort to identify recognized environmental conditions in connection with the Subject Property.

Scope of Work – The Environmental Site Assessment was conducted at the Subject Property in general accordance with the ASTM Standard E1527-05. This Assessment consisted of the following:

- Records Review
- Interviews with Persons Familiar with the Property
- A Site Visit
- Evaluation of Information and Preparation of the Report Provided Herein

Typically, an Environmental Site Assessment does not include sampling or testing of air, soil, groundwater, surface water, or building materials. These activities would be carried out in a Phase II ESA, if required.

Assumptions - There is a possibility that even with the proper application of these methodologies there may exist on the Subject Property conditions that could not be identified within the scope of the assessment or which were not reasonably identifiable from the available information. Watershed Eco, LLC believes that the information obtained from the record review and the interviews concerning the site is reliable.

Limitations – The accuracy and completeness of this report may be limited by the following:

- Physical Limitations - None
- Physical Obstructions to Observations – Interior Spaces not Accessible
- Outstanding Information Requests – No Chain of Title Provided
- Historical Data Source Limitations - None

The information and conclusions contained in this report are based upon work undertaken by trained professional and technical staff in accordance with generally accepted scientific practices current at the time the work was

performed. The conclusions and recommendations presented represent the best judgment of Watershed Eco, LLC based on the data obtained from the work. Due to the nature of investigation and the limited data available, Watershed Eco, LLC cannot warrant against undiscovered environmental liabilities.

Conclusions and recommendations presented in this report should not be construed as legal advice.

Should additional information become available which differs significantly from our understanding of conditions presented in this report, we request that this information be brought to our attention so that we may reassess the conclusions provided herein.

Special Terms and Conditions – Authorization to perform this work was given by Gulfstream Development on June 20, 2018. Instructions as to the location of the property, access and an explanation of the property and facilities were provided by Robert Harris of Gulfstream Development.

Reliance – This report was prepared for the sole benefit of the client. The report may not be relied upon by any other person or entity without the express written consent of Gulfstream Development, with the following exceptions: None.

SITE DESCRIPTION:

Location and Legal Description – The Subject Property is known as Willow Run (aka Good Will Farm) as depicted on the survey by True North, Land Surveying dated July 27, 2018 and the attached maps and figures (see attached).

Site and Vicinity Description – The Subject Property consists of approximately 56.41 acres located north and west of Bayard Road, west of the intersection with Central Avenue. The site was mainly in agricultural use with small woodland areas, a vacant residence and outbuildings, a vacant store and a cell tower parcel.



Figure 1: Property Location

Current Use of the Property – The Subject Property is currently in agricultural use and is cultivated in row crops. A series of tax ditches drain the Williams Main Canal Tax Ditch. Several outbuildings were present on the property along with a vacant residence, a vacant store and an active cell tower.

USER PROVIDED INFORMATION:

Title Records – A Chain of Title was not available at the time that this report was prepared.

Environmental Liens and Use Limitations – No environmental liens or use restrictions in connection with the Subject Property were identified by the Client.

Specialized Knowledge – James C. McCulley IV of Watershed Eco, LLC has no specialized knowledge of the property.

Valuation Reduction for Environmental Issues – No appraisal was provided. No environmental issues were identified that would have an impact on the site valuation and none were identified by the buyer or seller.

Reason for Study – The purpose of this study was to identify existing or potential Recognized Environmental Conditions (RECs) in connection with the Subject Property. Watershed Eco, LLC understands that the findings of this study will be used to evaluate a pending financial transaction in connection with the Subject Property.

Other Provided Information – A survey of the property was provided by Gulfstream Development. Gulfstream Development also provided verbal information related to the cell tower site. No other studies were provided.

RECORDS REVIEW:

Standard Environmental Records Sources – Watershed Eco, LLC contracted Environmental Data Resources, Inc. (EDR) to conduct a search of Federal and State databases containing known and suspected sites of environmental contamination. Inquiry Number 5346703.2s was delivered on June 27, 2018 and is attached to this report. The results are summarized below:

A portion of the Subject Property, the vacant store, was listed as Blue Hen Market in two of the databases searched by EDR, UST (Underground Storage Tanks) and LUST (Leaking Underground Storage Tanks). Records indicate that a 1000-gallon gasoline tank and 300-gallon heating oil tank were removed in February of 2001.

A review of DNREC records indicates that a No Further Action (NFA) Letter was issued on November 27, 2001 (see attached). This letter indicates that there is

contamination at the site of the previous tank and if any soil disturbances are planned in the area, a contaminated materials management plan must be approved by DNREC.

A cluster of four (4) sites were mapped south of the site. Due to location and review of site records, this cluster of sites is not a concern for the Subject Property.



Figure 2: Mapped Sites

No other sites were listed in the required search radii as detailed in the attached report.

Additional Environmental Record Sources – Several water wells are mapped on or in the vicinity the property. The DNREC report on the Blue Hen Market mentions that well testing was done and no contaminants found.

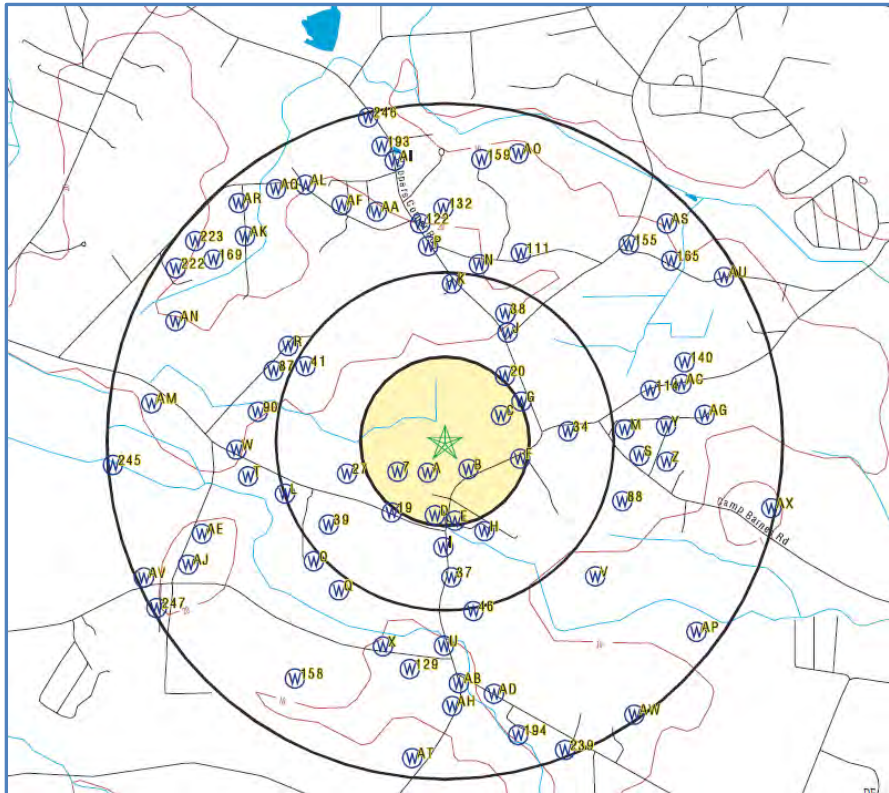


Figure 3: Well Mapping

There is nothing in the attached database records that indicates that there are any concerns with contamination in any of these wells or potential threats to the Subject property. Any wells found on the site should be properly abandoned.

Physical Setting Sources – A variety of mapping data and aerial photographs were used to define the physical setting of the property. These are further described below and in other sections of this report.

The site is depicted on the Frankford USGS quadrangle map with the most recent revision in 2014 (see below). Additionally, quadrangle maps from 1918, 1928, 1938, 1942, 1943, 1948, 1953, 1954, 1955, 1961, 1967, 1972, 1981, 1984, 1991 and 1992 were reviewed in order to determine the historical nature of the site and surrounding area and are described below (see attached maps).

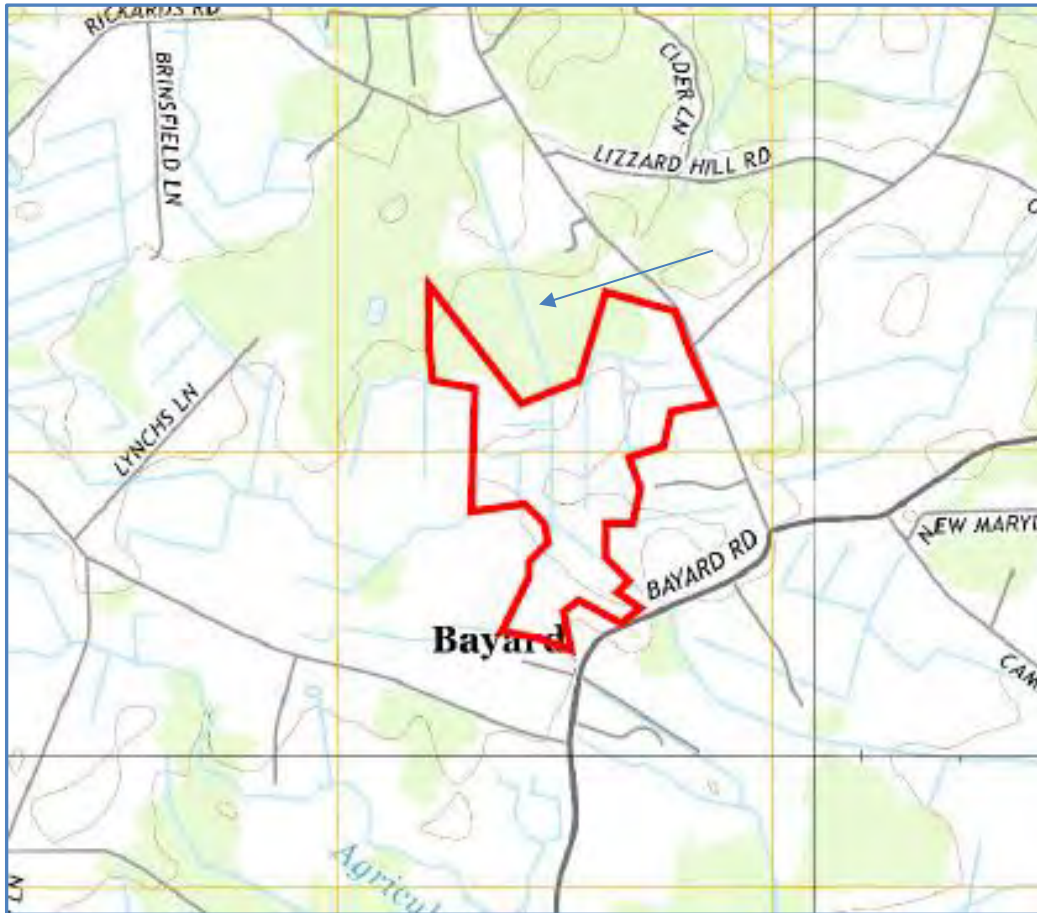


Figure 4: 2014 USGS Quad

A small residential building is depicted along Bayard Road in the southern portion of the site from 1918 through 1942. The residence and store on the northeastern portion of the site are depicted from 1918 through the present.

Man-made ditching is visible on the site starting in 1954.

Soils mapping indicates well drained through poorly drained soils on the site (see Soils Report). A field investigation to map wetlands indicated that most of the poorly drained soils on the site were drained by the on-site ditching.



Figure 5: Soils Map

Other Records – The Delaware Radon Database indicates that 32 Radon tests have been conducted in the 19945 zip code and all of the results are lower than 4 pCi/L, the U.S. EPA Data shows all radon tests within the zip code are lower than 4 pCi/L.

Historical Use Information – Historical USGS Maps and Available Aerial Photographs (see attached) were reviewed in order to determine past uses of the Subject Property and surrounding areas as described below:

The site was in agricultural use with a home and outbuildings depicted since the earliest aerial photo in 1953.

City Directories – City Directories for the Subject Property were reviewed and did not reveal any concerns (see attached Report).

Sanborn Historical Maps – Sanborn Fire Insurance Maps for the Subject Property and surrounding area are not available (see attached Report).

SITE RECONNAISSANCE:

Methodology – The site reconnaissance was conducted on March 27, 2017 and June 20, 2018 by James C. McCulley IV of Watershed Eco, LLC. Weather conditions were sunny and warm at the time of the investigations. The visual reconnaissance consisted of observing the boundaries of the property and systematically traversing the site to provide an overlapping field of view, wherever possible. The periphery of onsite structures was observed. Photographs of pertinent areas of the site are included below.

General Site Setting – The site is a flat agricultural site, cultivated in row crops and drained by man-made ditches. Several vacant buildings were observed on the site, including a residence, outbuildings and a vacant store. An active cell tower was observed on the site.

Two above ground home heating oil storage tanks were observed in association with the vacant residence.

Hazardous Substances – No hazardous substances were observed at the site at the time of the investigation.

Petroleum Products – Two above ground home heating oil storage tanks were observed in association with the vacant residence.

USTs – No evidence of USTs was observed on the property. DNREC records indicate that two tanks were removed in 2001 and left behind petroleum

contamination in the site soils. No soil disturbances should take place in this area without an approved management plan (see attached letter).

ASTs – Two above ground home heating oil storage tanks were observed in association with the vacant residence.

The cell tower had an emergency generator with a diesel tank that appeared to have secondary containment.

Other Suspect Containers – No suspect containers were observed on the site.

Equipment Likely to Contain PCBs – No equipment likely to contain PCBs was observed on the Subject Property.

Pits, Ponds and Lagoons – No ponds, pits or lagoons were observed on the Subject Property.

Solid Waste Dumping – No solid waste dumping was observed on the property.

Stained Soil/Stressed Vegetation – No areas of stained soils were observed on the Subject Property.

Wells – Evidence of two wells were observed on or near the property.

INTERVIEWS:

Robert Harris – provided information with respect to site history and current site conditions as referenced throughout this report. No concerns were raised as a result of discussions with Mr. Harris.

OTHER ENVIRONMENTAL CONSIDERATIONS:

Asbestos Containing Materials – No suspected ACM were observed on the property.

Lead Based Paint – No potential lead paint concerns were noted on the property.

Radon – The database information indicates low likelihood of elevated radon levels.

Wetlands – A wetland delineation was conducted by Watershed Eco (see attached).

CONCLUSIONS:

The following Recognized Environmental Conditions (RECs) were identified:

1. Petroleum contaminated soils are associated with the LUSTs at the former Blue Hen Market.
2. Two Above Ground Home Heating Oil Tanks were observed to be associated with the vacant residence.
3. An Above Ground Storage Tank appeared to be in use for the diesel backup generator associated with the cell tower.

The study conducted by Watershed Eco, LLC. did not reveal any other Recognized Environmental Conditions (RECs).

If any RECs are discovered in the future, please contact Watershed Eco, LLC. immediately.

The following actions are recommended:

1. Prepare a management plan for DNREC approval, for any soil disturbances in the are of the former Blue Hen Market.
2. Remove and properly dispose of the home heating oil tanks.
3. Review the cell tower lease to confirm that the tower company is responsible for any releases.
4. Properly abandon any well or septic systems associated with the vacant residence or store site.

REPRESENTATIVE PHOTOS



Photo 1: Vacant Store Site



Photo 2: Vacant Residence



Photo 3: Home Heating Oil Tanks at Residence



Photo 4: Outbuilding at Residence



Photo 5: Cell Tower Site



Photo 6: Cell Tower Site



Photo 7: Agricultural Field



Photo 8: Ditch and Farm Crossing



Photo 9: Woodlands



Photo 10: Man-Made Ditch

Appendices

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL
DIVISION OF AIR & WASTE MANAGEMENT
391 LUKENS DRIVE
NEW CASTLE, DE 19720-2774



WASTE MANAGEMENT SECTION
UNDERGROUND STORAGE TANK BRANCH

TELEPHONE: (302) 395-2500
FAX No.: (302) 395-2601

November 27, 2001

Ms. Elsie M. Quillen
C/O Mr. & Mrs. Elmer Evans
Rd 2, Box 116
Frankford, DE 19946

FILE

RE: Blue Hen Market
Peppers Corner Road
Frankford, DE 19945

Facility ID#: 5-000946
Project ID#: S0104034
File Code: 30

SUBJECT: No Further Action Required

Dear Ms. Quillen:

The Delaware Department of Natural Resources and Environmental Control, Underground Storage Tank (UST) Branch (the Department) performed a limited hydrogeologic investigation at the above referenced facility on August 22, 2001 using direct push technology. Five (5) soil samples and three (3) groundwater samples were collected from the above-referenced site in the area of the former UST pit and dispenser location. In addition, the store supply well was sampled from the spicket outside the building (well is on adjacent property – exact location and depth are unknown). Summaries of all analytical results are included within the enclosed UST Site Closure Report.

Outcome

Based on the analytical results and conclusions summarized in the enclosed report, it appears that any residual contamination at this location poses no threat to human health and safety, and to the environment. Therefore, no further action (NFA) is required at this site at this time, *as long as the residual contamination onsite remains undisturbed*. However, if any digging, boring, or excavation occurs on this site in the area of residual contamination *the following conditions apply*:

- Any excavated soils in the area of residual contamination comprise solid waste and may not be re-used as "clean fill." Excavated soils may be transported offsite for proper disposal, or bioremediated onsite (e.g., a biopile).
- If excavated soils are transported off-site, they must be hauled by a State-permitted solid waste hauler and disposed or remediated in an approved manner.
- If excavated soils are remediated on-site (e.g., a "biopile"), a plan to accomplish the remediation must be approved in advance by the Underground Storage Tank Branch.
- If the petroleum compounds remaining in the soil or ground water on-site are disturbed in the future by digging, boring, dewatering or other means, a contaminated materials management plan must be approved in advance by the Underground Storage Tank Branch.

Delaware's good nature depends on you!

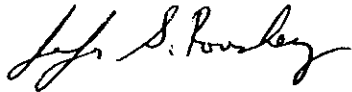
Ms. Elsie Quillen
November 27, 2001
Page Two

In addition, pursuant to "*Regulations governing underground storage tank systems,*" and 7 Del.C., Chapter 74, this letter does not release the responsible party from liability for any future problem related or unrelated to the two (2) USTs removed at this location. If an environmental problem is identified, immediate action must be taken to eliminate any threat to public health and safety, and to the environment, and the Department must be notified.

In all cases, the Department of Natural Resources and Environmental Control reserves the right to re-assess the site in the future if new information comes to light regarding possible petroleum contamination.

If you have any further questions about your facility please feel free to call (302) 395-2500 or visit us on the web at <http://www.dnrec.state.de.us/dnrec2000/Divisions/AWM/ust/>.

Sincerely,



Jennifer S. Roushey
Hydrologist
Underground Storage Tank Branch

pc: Eugene Bayard, Attorney

Enclosure

EDMLJSR\tlc
JSR2001-120

GOOD WILL FARM

SUSSEX COUNTY, DELAWARE

PRELIMINARY SUBDIVISION PLAN

TAX MAP 134-18.00-55.00 & 134-19.00-5.00 & 6.00

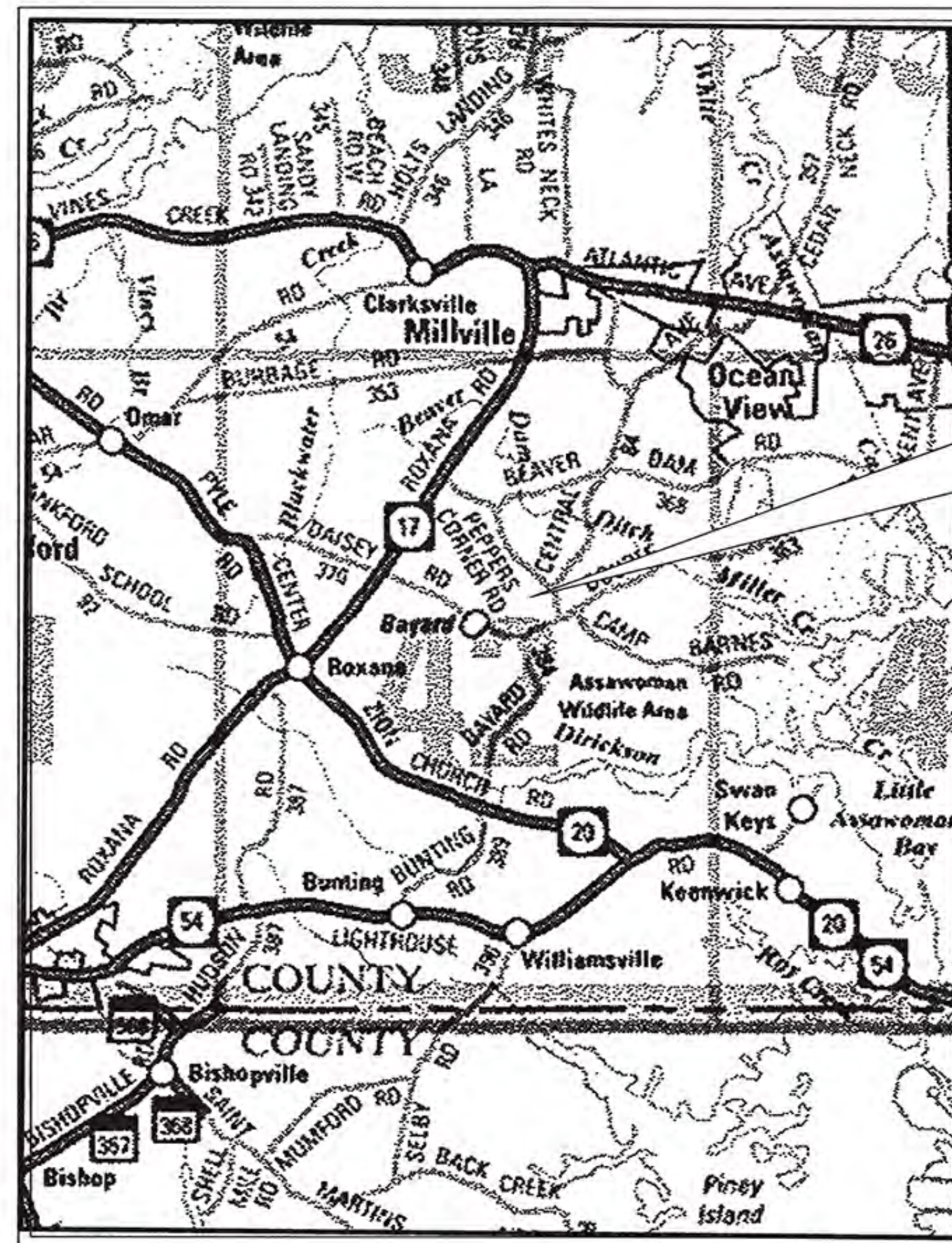
LIST OF DRAWINGS

PSP-1.0	COVER SHEET
PSP-2.0	KEY SHEET - EXISTING CONDITIONS
PSP-2.1	EXISTING CONDITIONS
PSP-2.2	EXISTING CONDITIONS
PSP-3.0	KEY SHEET - PROPOSED SITE PLAN
PSP-3.1	PROPOSED SITE PLAN
PSP-3.2	PROPOSED SITE PLAN
PSP-4.0	SITE PLAN RENDERING

GMB FILE NO. 180157

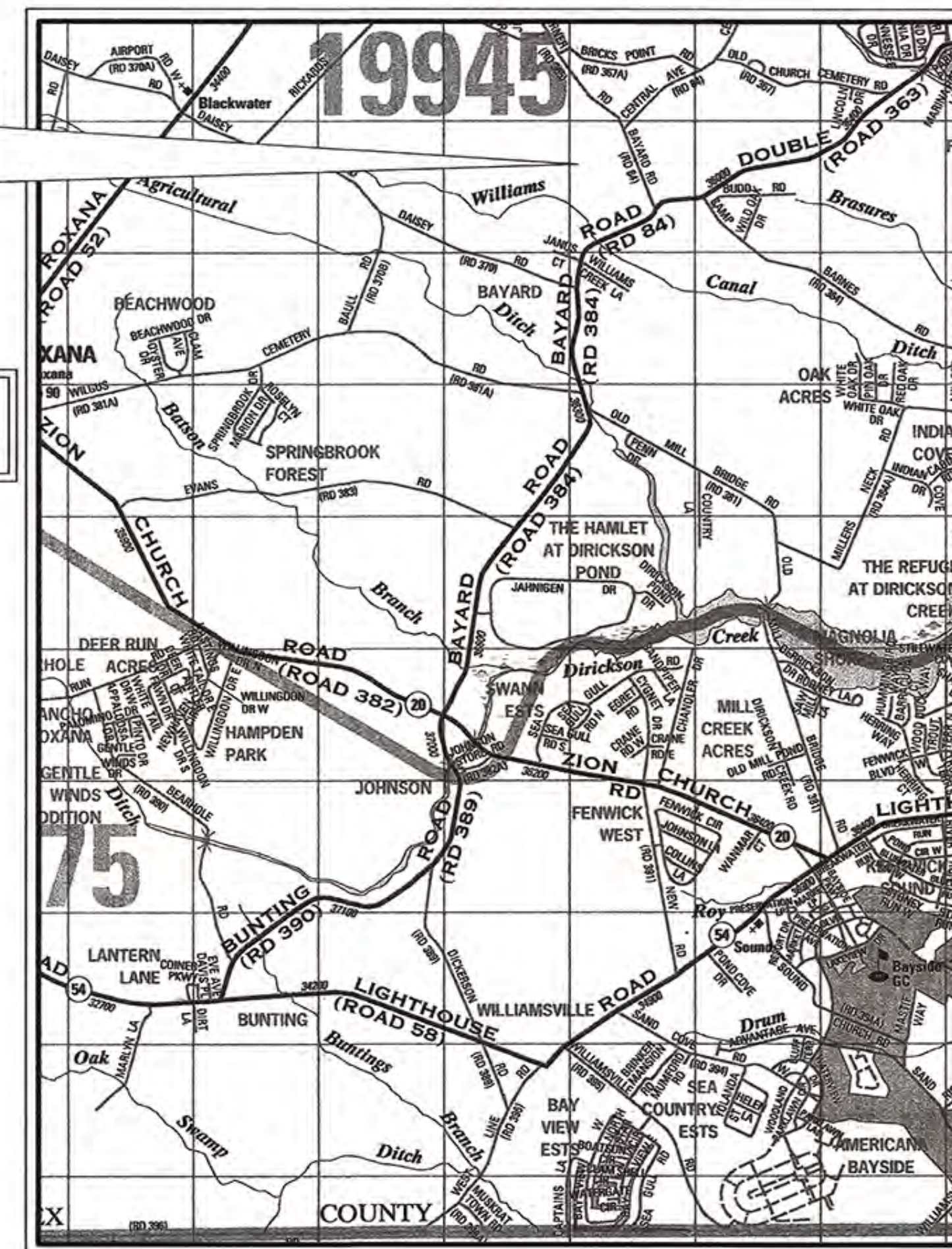
NOTES:

1. ALL INTERIOR SIDE LOT LINES ARE RESERVED FOR THE CENTERLINE OF A 10' WIDE DRAINAGE AND/OR UTILITY EASEMENT. A 10' WIDE DRAINAGE AND/OR UTILITY EASEMENT IS RESERVED ON EACH LOT ALONG THE FRONT AND REAR PROPERTY LINES. THIS PLAN AND SURVEY DOES NOT VERIFY THE EXISTENCE OR NON-EXISTENCE OF RIGHT-OF-WAYS OR EASEMENTS PERTAINING TO THIS PROPERTY.
2. MAINTENANCE OF THE STREETS WITHIN THIS SUBDIVISION WILL BE THE RESPONSIBILITY OF THE DEVELOPER, THE PROPERTY OWNERS WITHIN THE SUBDIVISION, OR BOTH. THE STATE ASSUMES RESPONSIBILITY FOR THE FUTURE MAINTENANCE OF STREETS WITHIN DEDICATED DELDOT RIGHT-OF-WAYS ONLY.
3. MAINTENANCE OF STORM DRAIN AND STORMWATER MANAGEMENTS FACILITIES WILL BE THE RESPONSIBILITY OF THE DEVELOPERS, THE PROPERTY OWNERS WITHIN THE SUBDIVISION, OR BOTH. THE STATE ASSUMES RESPONSIBILITY FOR THE FUTURE MAINTENANCE OF STORM DRAIN WITHIN DEDICATED DELDOT RIGHTS OF WAY ONLY.
4. ALL SIDEWALKS MUST BE INSTALLED IN CONJUNCTION WITH THE ROADS, AND FOR THE PROJECT TO ACHIEVE SUBSTANTIAL COMPLETION FROM THE PUBLIC WORKS DIVISION.
5. WATER SERVICE WILL BE PROVIDED BY CONNECTION TO AN EXISTING PUBLIC SYSTEM. ALL DISTRIBUTION EQUIPMENT WILL BE INSTALLED AND MAINTAINED BY TIDEWATER UTILITIES, INC. ALL PROPOSED FACILITIES WILL BE SUBJECT TO REVIEW AND APPROVAL BY SUSSEX COUNTY AND DELAWARE DIVISION OF PUBLIC HEALTH.
6. WASTEWATER TREATMENT AND DISPOSAL WILL BE PROVIDED BY THE SUSSEX COUNTY ENGINEERING DEPARTMENT, SOUTH COASTAL WASTE WATER TREATMENT FACILITY. THE COLLECTION AND TRANSMISSION SYSTEM WILL CONSIST OF VARIOUS DIAMETER GRAVITY SEWERS. THE COLLECTION AND TRANSMISSION SYSTEM WILL BE SUBJECT TO REVIEW AND APPROVAL BY SUSSEX COUNTY AND DNREC.
7. THERE IS ACTIVE AGRICULTURAL PROPERTY GREATER THAN 10 ACRES DIRECTLY ABUTTING THE PROPOSED DEVELOPMENT.
8. NON-TIDAL WETLANDS EXIST ON THE PROPERTY.
9. STORMWATER MANAGEMENT PRACTICES WILL BE DESIGNED TO MEET STORMWATER QUALITY AND QUANTITY MANAGEMENT REQUIREMENTS. ALL STORMWATER MANAGEMENT DESIGN WILL BE IN ACCORDANCE WITH DELAWARE STORMWATER DESIGN MANUAL STANDARDS.
10. EASEMENTS SHALL BE PROVIDED WHERE NECESSARY TO MEET PUBLIC UTILITY REQUIREMENTS. NECESSARY EASEMENTS ALONG PERIMETER BOUNDARIES OF THE DEVELOPMENT SHALL BE NO LESS THAN TEN (10) FEET IN WIDTH ON THE INTERIOR SIDE OF THE BOUNDARY.
11. BOUNDARY & TOPOGRAPHICAL SURVEY SHOWN HEREIN PROVIDED BY TRUE NORTH LAND SURVEYING DATE JULY 27, 2018.
12. PROJECT WILL BE CONSTRUCTED IN PHASES.
13. THE POOL AND CLUBHOUSE AMENITY WILL BE AVAILABLE FOR THE RESIDENTS OF THE ENTIRE GOOD WILL FARM COMMUNITY.
14. EXISTING TAX DITCHES AND THEIR RESPECTIVE RIGHTS OF WAY ARE TO BE MAINTAINED IN ACCORDANCE WITH COURT ORDER CHANGE AGREEMENTS AND DNREC DRAINAGE PROGRAM REQUIREMENTS.
15. ALL WOODED BUFFERS, OPEN SPACES, PARKS, TRAILS, AND POOL / BATHHOUSE WILL BE MAINTAINED IN PERPETUITY BY THE WILLOW RUN HOMEOWNER'S ASSOCIATION.
16. THE GOOD WILL FARM SITE WILL RESULT IN THE CREATION OF BOTH ACTIVE AND PASSIVE OPEN SPACE AREAS WITHIN THE SUBDIVISION BOUNDARIES.
17. THE PASSIVE OPEN SPACE AREAS ARE CONFINED TO THE TWO EXISTING WETLANDS POCKETS IDENTIFIED BY WATERSHED ECO DURING THE WETLAND DELINEATION PROCESS AND THE PROPOSED EXTENSIVE PERIMETER LANDSCAPE BUFFERING SYSTEM. THOSE EXISTING WETLANDS THAT ARE CURRENTLY WOODED, ARE IN A STABLE CONDITION AND EXTENSIVELY VEGETATED WITH NATIVE SPECIES THROUGHOUT. THE MANAGEMENT OF THE EXISTING PASSIVE OPEN SPACE AREAS WILL BE TO PRESERVE NATIVE TREES AND SHRUBS IN THE CURRENT CONDITION. NO CLEARING, DISTURBANCE, OR ALTERING OF VEGETATION SHALL BE PERMITTED EXCEPT THE REMOVAL OF DEAD AND DYING TREES, WHICH POSE A THREAT TO PUBLIC SAFETY OR ADJACENT PRIVATE PROPERTY.
18. THE LANDSCAPE BUFFER AREAS WILL BE VEGETATED IN CONFORMANCE WITH A DETAILED PLAN PREPARED UNDER THE DIRECTION OF A DELAWARE LICENSED LANDSCAPE ARCHITECT AND APPROVED BY THE DELAWARE STATE FORESTRY DEPARTMENT. THE GUIDELINES FOR PREPARATION OF THE LANDSCAPE BUFFER ARE FOUND IN THE SUSSEX COUNTY CODE MAINTENANCE OF LANDSCAPE BUFFER AREAS WILL BE UNDER THE DIRECTION OF QUALIFIED ARBORISTS AND MAINTENANCE PROFESSIONALS UNDER CONTRACT TO THE GOOD WILL FARM HOME OWNER'S ASSOCIATION.
19. THE BALANCE OF THE OPEN SPACE IN GOOD WILL FARM WILL BE USED MORE ACTIVELY BY THE RESIDENTS AND THEIR GUESTS. THESE ACTIVE OPEN SPACE AREAS ARE ADJOINING STORM WATER PONDS AND TAX DITCH SYSTEMS, WHICH WILL REQUIRE MAINTENANCE CONFORMING TO DNREC DIVISION OF WATERSHED STEWARDSHIP STANDARDS. AN ACTIVE OPEN SPACE MANAGEMENT PLAN WILL BE DEVELOPED BY A QUALIFIED PROFESSIONAL THAT WILL OUTLINE THE PROGRAM FOR PERPETUAL MAINTENANCE AND ADDRESS PESTICIDES AND FERTILIZER APPLICATION RATES AND FREQUENCY SCHEDULES. THE PERPETUAL MAINTENANCE WILL BE ACCOMPLISHED BY QUALIFIED INDIVIDUALS AND FIRMS SPECIALIZING IN THIS FIELD AND UNDER CONTRACT TO THE GOOD WILL FARM HOME OWNER'S ASSOCIATION. THE GOOD WILL FARM RESTRICTIVE COVENANTS WILL REQUIRE THE HOME OWNERS TO ENGAGE A QUALIFIED PROFESSIONAL TO IMPLEMENT THE OPEN SPACE MANAGEMENT PLAN.



GOOD WILL FARM

PROJECT LOCATION



LOCATION MAP

SCALE: 1" = 2000'

VICINITY MAP

SCALE: 1" = 1 MILE

DEVELOPER'S CERTIFICATION:

I HEREBY CERTIFY THAT I AM THE DEVELOPER OF THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN AND THAT THE PLAN WAS MADE AT MY DIRECTION.

GULFSTREAM DEVELOPMENT, LLC. DATE
27 ATLANTIC AVENUE
OCEAN VIEW, DELAWARE 19970

WETLANDS CERTIFICATION:

THIS SITE HAS BEEN EXAMINED FOR THE PRESENCE OF WATERS OF THE STATE (SWAMPY LANDS) AND WATERS OF THE U.S., INCLUDING WETLANDS, IN ACCORDANCE WITH THE PROCEDURES SET FORTH IN REGULATION AND POLICY. THE FEATURES DEPICTED ON THIS PLAN ACCURATELY REPRESENT THE FEATURES IDENTIFIED AND FLAGGED IN THE FIELD BY WATERSHED ECO LLC AND DESCRIBED IN WRITTEN REPORTS.

JAMES C. MCCULLEY IV, PWS # 000471

ENGINEER'S CERTIFICATION:

I, STEPHEN L. MARSH, P.E. HEREBY CERTIFY THAT I AM A REGISTERED ENGINEER IN THE STATE OF DELAWARE, THAT THE INFORMATION SHOWN HERE HAS BEEN PREPARED UNDER MY SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEVE REPRESENTS GOOD ENGINEERING PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.

STEPHEN L. MARSH, P.E. DATE
GEORGE, MILES & BUHR, LLC
206 W. MAIN STREET
SALISBURY, MD 21801



GMB
GEORGE, MILES & BUHR, LLC
ARCHITECTS & ENGINEERS
SALISBURY • BALTIMORE • SEAFORD
206 WEST MAIN STREET
SALISBURY, MARYLAND 21801
410-742-3115, FAX 410-548-5790
www.gmbnet.com

LAND TECH
LAND PLANNING, LLC
32895 S COASTAL HWY
TAGGART PROFESSIONAL CENTER, SUITE 202
BETHANY BEACH, DELAWARE 19930
PHONE: (302) 539-2366

JANUARY 2019

SITE DATA:

DEVELOPER:
GULFSTREAM DEVELOPMENT, LLC
37671 LAKE RIDGE DR
OCEAN VIEW, DE 19970

CONTACT: ROBERT J. HARRIS, JR.
302-539-6178

CIVIL ENGINEER:
GEORGE, MILES & BUHR, LLC
206 WEST MAIN STREET
SALISBURY, MD 21801

CONTACT: STEVE MARSH, P.E.
410-742-3115

TAX DISTRICT 134, MAP 18.00, PARCEL 55.00 AND TAX DISTRICT 134, MAP 19.00, PARCELS 5 & 6

SITE AREA - GROSS AREA: 56.41 ACRES
EXISTING WOODED AREA: 10.19 ACRES
WOODED AREA TO REMAIN: 4.62 ACRES
EXISTING NON TIDAL WETLANDS: 0.96 ACRES

PROPOSED OPEN SPACE: 24.96 ACRES (44%)
(SWM PONDS, WOODED WETLANDS, WOODED BUFFER, TAX DITCH ROW)

PROPOSED DEVELOPED AREA: 31.45 ACRES (56%)

OWNERS:
JOSEPH & KAREN ZDURENICK
37671 LAKE RIDGE DR
SELBYVILLE, DE 19975
PARCEL 134-18.00-55.00

JOEL DANIEL GUSKY
36828 JAWHAGEN DR
FRANKFORD, DE 19945
PARCELS 134-19.00-5.00 & 6.00

LANDSCAPE ARCHITECTURE:
LANDTECH LAND PLANNING, LLC
32895 S COASTAL HWY
TAGGART PROFESSIONAL CENTER, SUITE 202
BETHANY BEACH, DE 19930
CONTACT: JEFFERY CLARK, RLA
302-539-2366

ZONING DATA
PRESENT ZONING: AR-1
PROPOSED ZONING: AR-CLUSTER
PRESENT USE: AGRICULTURAL
PROPOSED USE: RESIDENTIAL

UNIT COUNTS
SINGLE FAMILY: 104

ALLOWABLE DENSITY: 2 UNITS/ACRE = 112 UNITS

GROSS DENSITY: 1.83 UNITS/ACRE
NET DENSITY: 3.58 UNITS/ACRE

MIN LOT WIDTH: 75'
MIN LOT DEPTH: 100'
MIN LOT AREA: 7500 SF

SETBACKS
FRONT: 25'
SIDE: 10'
REAR: 10'

REQUIRED PARKING: 2 OFF STREET PARKING SPACES PER LOT
PARKING PROVIDED: 2 OFF STREET PARKING SPACES PER LOT

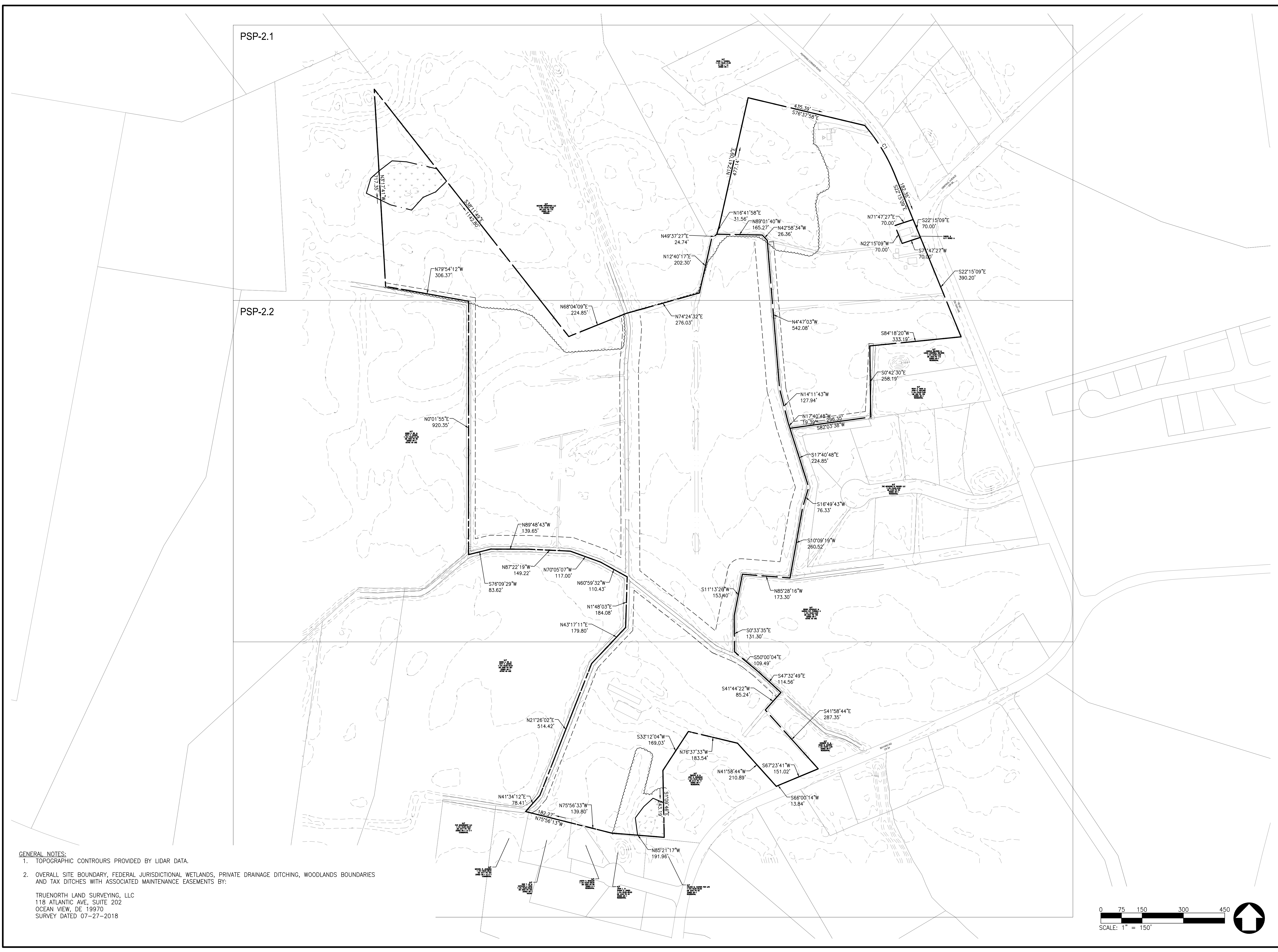
AMENITIES
NEIGHBORHOOD POOL, ACTIVE AND PASSIVE OPEN SPACE

FLOOD ZONE X - AREAS TO BE DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN PER FEMA MAP# 10050C495K, DATED MAR 16, 2015

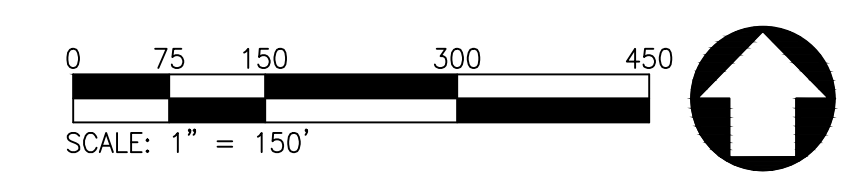
WATER PROVIDER - TIDEWATER UTILITIES, INC.

SEWER PROVIDER - SUSSEX COUNTY

C:\Projects\2018\180157\180157-001\180157-001-Key-Sheet-Existing-Contours.dwg, 1/11/2019 10:41 AM, Lenton, Wjck
 PEN=RED 0.01 INCHES (0.25mm) PEN=GREEN 0.01 INCHES (0.25mm) PEN=BLUE 0.01 INCHES (0.25mm) PEN=WHITE 0.01 INCHES (0.25mm)
 PEN=RED 0.01 INCHES (0.25mm) PEN=GREEN 0.01 INCHES (0.25mm) PEN=BLUE 0.01 INCHES (0.25mm) PEN=WHITE 0.01 INCHES (0.25mm)



GENERAL NOTES:
 1. TOPOGRAPHIC CONTOURS PROVIDED BY LIDAR DATA.
 2. OVERALL SITE BOUNDARY, FEDERAL JURISDICTIONAL WETLANDS, PRIVATE DRAINAGE DITCHING, WOODLANDS BOUNDARIES AND TAX DITCHES WITH ASSOCIATED MAINTENANCE EASEMENTS BY:
 TRUENORTH LAND SURVEYING, LLC
 118 ATLANTIC AVE, SUITE 202
 OCEAN VIEW, DE 19970
 SURVEY DATED 07-27-2018

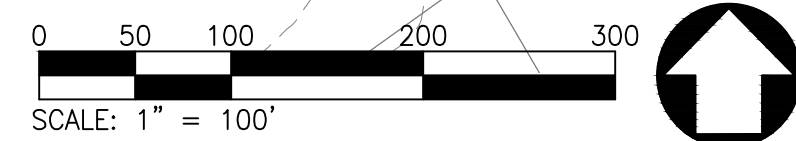
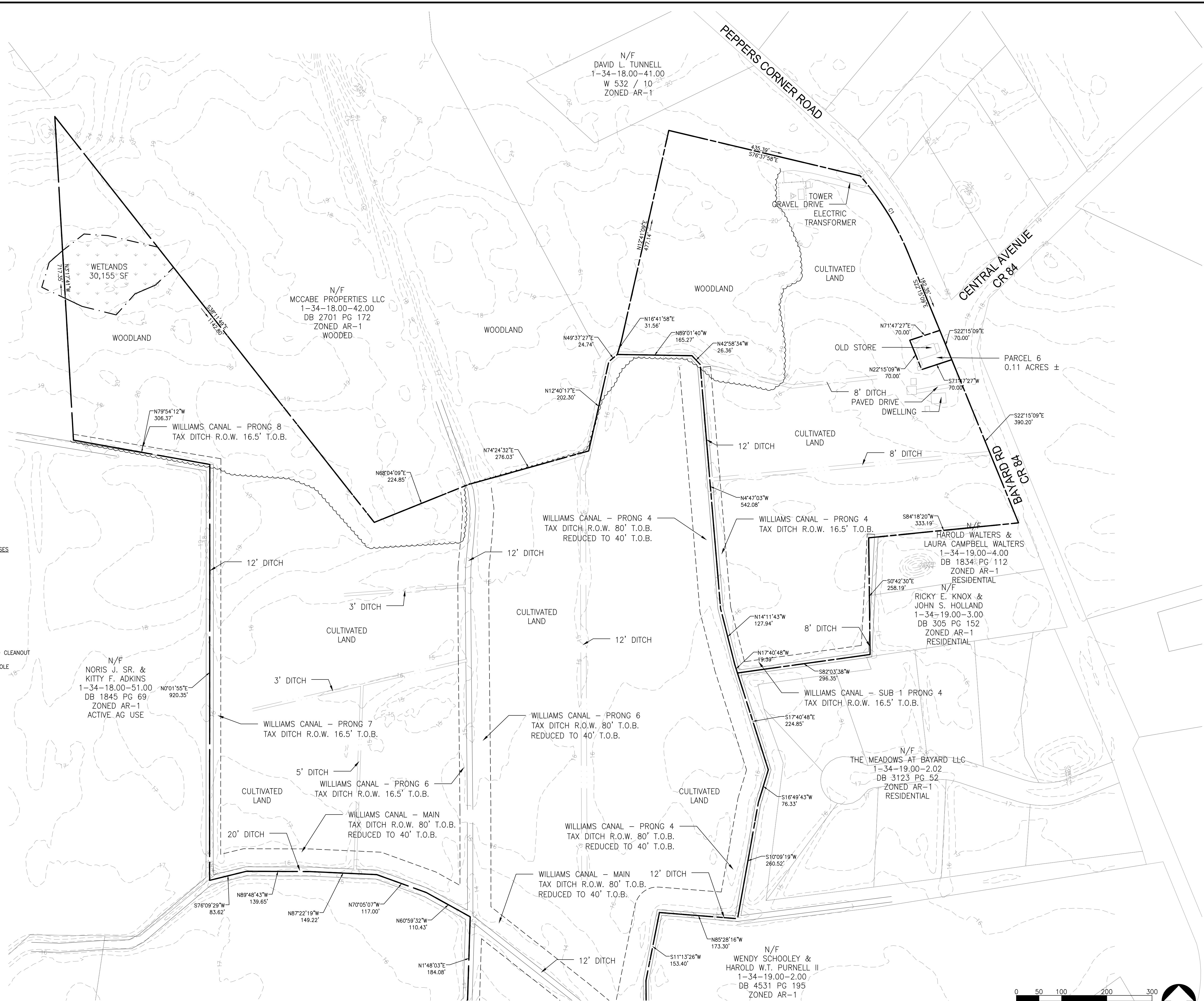


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 LAND PLANNING, LLC <small>32895 S. COASTAL HWY., SUITE 202 TAGGART, MARYLAND, DE 19960 PHONE: (302) 539-2366</small>	
 GEORGE, MILES & BUHR, LLC <small>ARCHITECTS & ENGINEERS SALISBURY • BALTIMORE • SEAFORD 206 WEST MAIN STREET SALISBURY, MARYLAND 21801 410-742-3115, FAX 410-548-5790 www.gmbnet.com</small>	
GOOD WILL FARM SUSSEX COUNTY, DELAWARE	
KEY SHEET - EXISTING CONDITIONS	
SCALE : 1" = 150'	SHEET NO.
DESIGN BY : JAC	PSP-2.0
DRAWN BY : RLM	
CHECKED BY :	
GMB FILE : 180157	
DATE : JAN 2019	
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LEGEND

EXISTING/PROPOSED OTHER PHASES

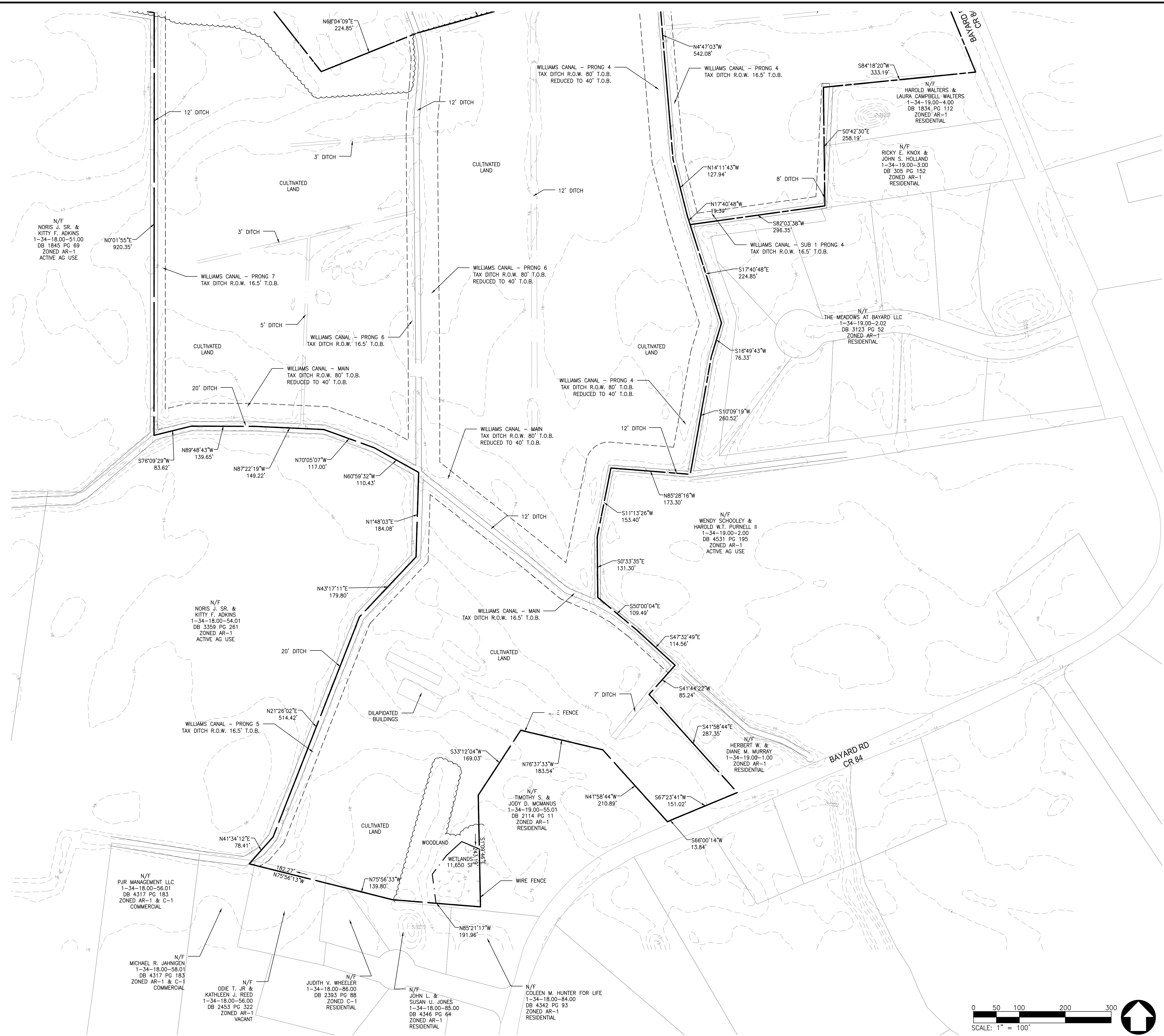
- PROPERTY LINE/RIGHT OF WAY
- - - CONTOUR
- PROJECT BOUNDARY
- ▨ NONTIDAL WETLANDS UNDER CORPUS JURISDICTION
- ▨ NONTIDAL WATERS UNDER CORPUS JURISDICTION
- ▭ PAVED ROAD
- 85 SANITARY SEWER, MANHOLE, AND CLEANOUT
- 15000 STORM DRAIN, INLET, AND MANHOLE
- FLOOD ZONE
- WATER MAIN
- FORCE MAIN



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 PREPARED BY: <div style="display: inline-block; vertical-align: middle; font-size: 8px; margin-left: 10px;"> GEORGE, MILES & BUHR, LLC ARCHITECTS & ENGINEERS SALISBURY • BALTIMORE • SEAFORD 206 WEST MAIN STREET SALISBURY, MARYLAND 21801 410-742-3115, FAX 410-548-5790 www.gmbnet.com </div>	
 GOOD WILL FARM SUSSEX COUNTY, DELAWARE	
EXISTING CONDITIONS	
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DESIGN BY: JAC	PSP-2.1
DRAWN BY: RLM	
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DATE: JAN 2019	
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LEGEND

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 - FORCE MAIN



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PREPARED BY: **LAND TECH** LAND PLANNING, LLC

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GMB GEORGE, MILES & BUHR, LLC
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GOOD WILL FARM
SUSSEX COUNTY, DELAWARE

EXISTING CONDITIONS

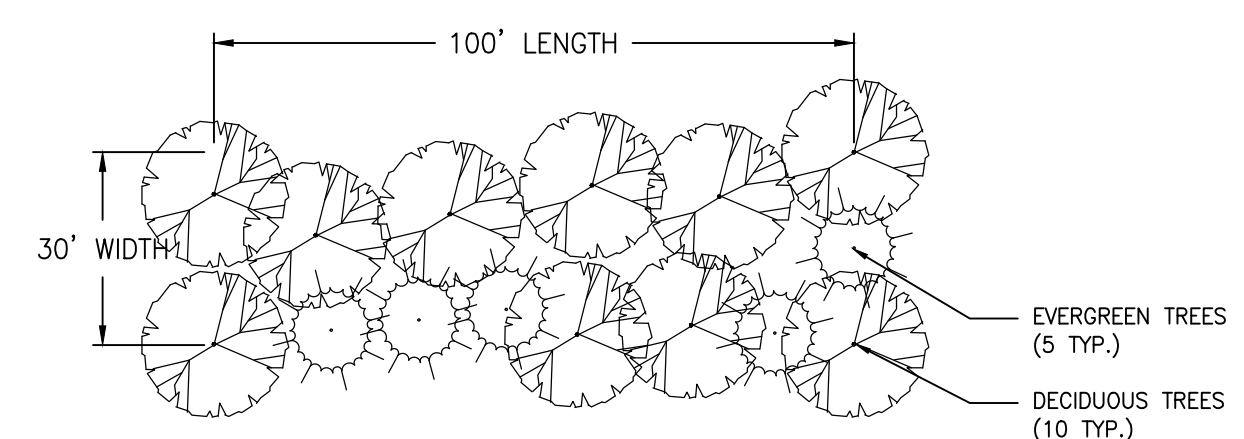
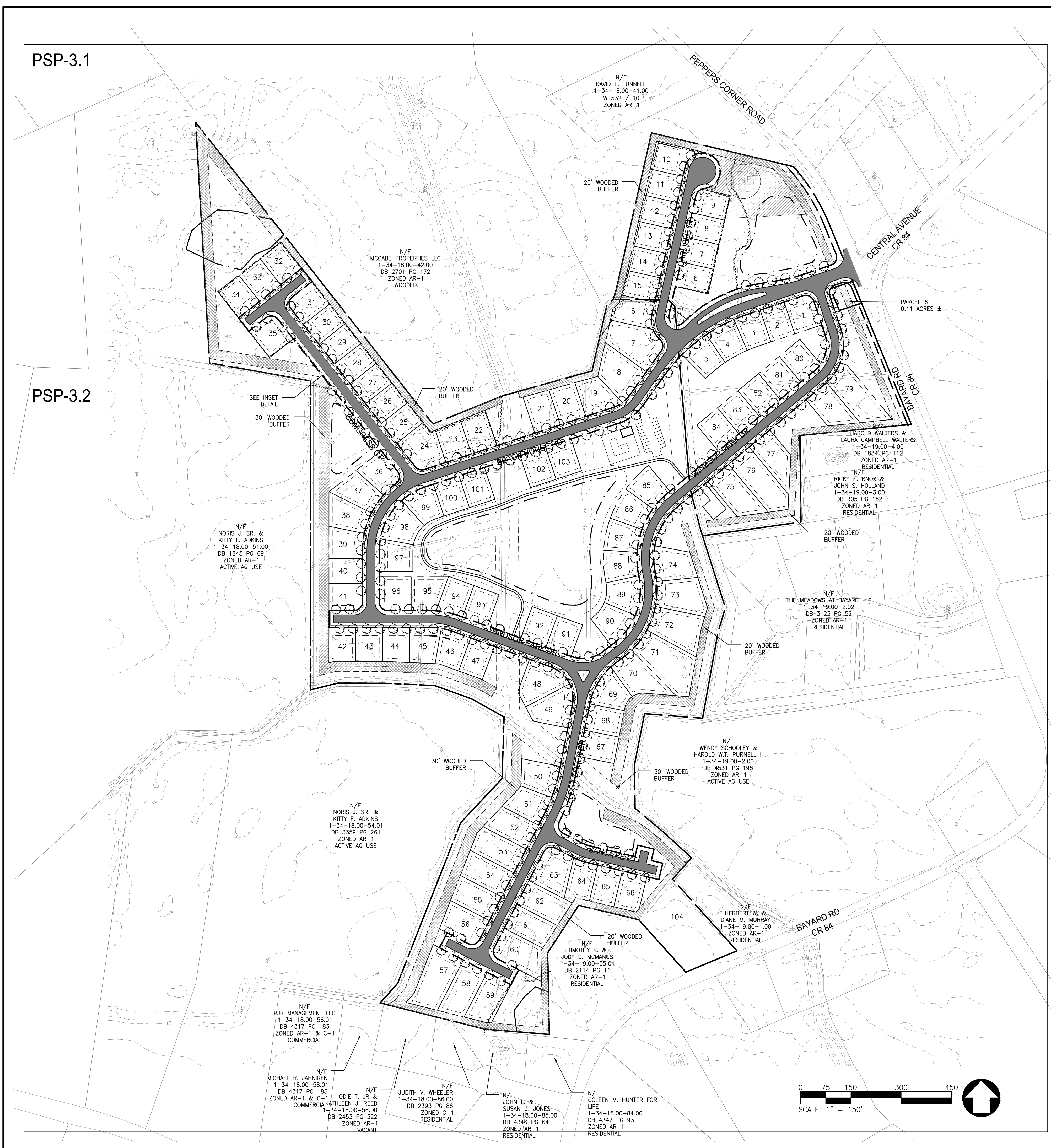
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CHECKED BY:
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PSP-3.1

PSP-3.2



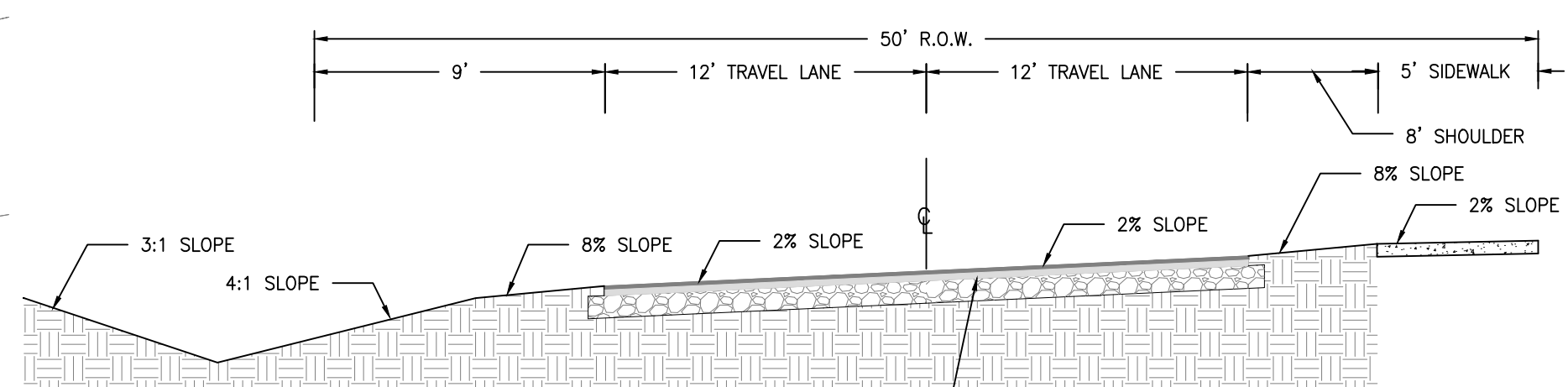
30' LANDSCAPE BUFFER PLANTING LIST

ID	% MIX	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
DECIDUOUS TREES (QUANTITY = 10 PER 100 LF)					
AR	20%	ACER RUBRUM	OCTOBER GLORY	1.5" CAL.	B&B NATIVE
BN	15%	BETULA NIGRA	RIVER BIRCH	5" HGT.	B&B MULTI-STEMMED NATIVE
FP	10%	PLATANODES X ACERIFOLIA	LONDON PLANE TREE	1.5" CAL.	B&B HYBRID OF NATIVE
NS	20%	NYSSA SYLVATICA	BLACK GUM	1.5" CAL.	B&B NATIVE
QP	35%	QUERCUS PALUSTRIS	PIN OAK	1.5" CAL.	B&B NATIVE
EVERGREEN TREES (QUANTITY = 5 PER 100 LF)					
CT	25%	CHAMAECYPARIS THYOIDES	ATLANTIC WHITE CEDAR	5" HGT.	B&B NATIVE
IO	25%	ILEX OPACA	AMERICAN HOLLY	5" HGT.	B&B NATIVE
JV	25%	JUNPEROSUS VIRGINIANA	EASTERN RED CEDAR	5" HGT.	B&B NATIVE
PS	25%	PINUS STROBUS	EASTERN WHITE PINE	5" HGT.	B&B NATIVE

* - % MIX DENOTES PERCENTAGE OF TREE SPECIES FOR OVERALL BUFFER PLANTINGS.

FORESTED AND/OR LANDSCAPED BUFFER STRIP
 A STRIP OF LAND, NOT LESS THAN 20 FEET IN WIDTH, EXCLUSIVE OF ANY RESIDENTIAL LOTS, STORMWATER MANAGEMENT AREAS OR FACILITIES, OPEN SPACE (EXCEPT THAT THE LAND AREA WITHIN THE BUFFER STRIP MAY BE INCLUDED IN THE OVERALL CALCULATION OF OPEN SPACE), RECREATIONAL AMENITIES, WASTEWATER TREATMENT AND/OR DISPOSAL FACILITIES, WATER TREATMENT FACILITIES, STREETS, BUILDINGS OR OTHER SURFACE IMPROVEMENTS AND LOCATED ALONG THE ENTIRE OUTER PERIMETER OF ANY PORTION OF A MAJOR SUBDIVISION OF LANDS INTO FOUR OR MORE LOTS ADJACENT TO LAND OF OTHER OWNERSHIP. A LANDSCAPE PLAN FOR THE BUFFER SHALL BE DESIGNED AND CERTIFIED BY A LICENSED LANDSCAPE ARCHITECT, LICENSED FORESTER OR FORESTER DESIGNATED BY THE SOCIETY OF AMERICAN FORESTERS AS A "CERTIFIED FORESTER." THE LANDSCAPE PLAN SHALL BE REVIEWED AND COMMENTED ON BY THE STATE FORESTER AND SHALL BE SUBJECT TO THE FINAL REVIEW AND APPROVAL OF THE COMMISSION.

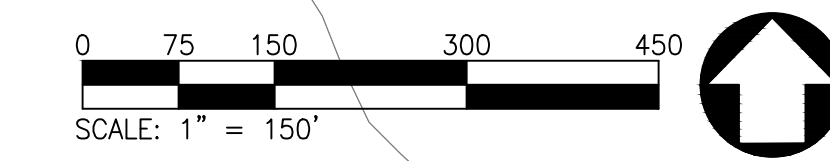
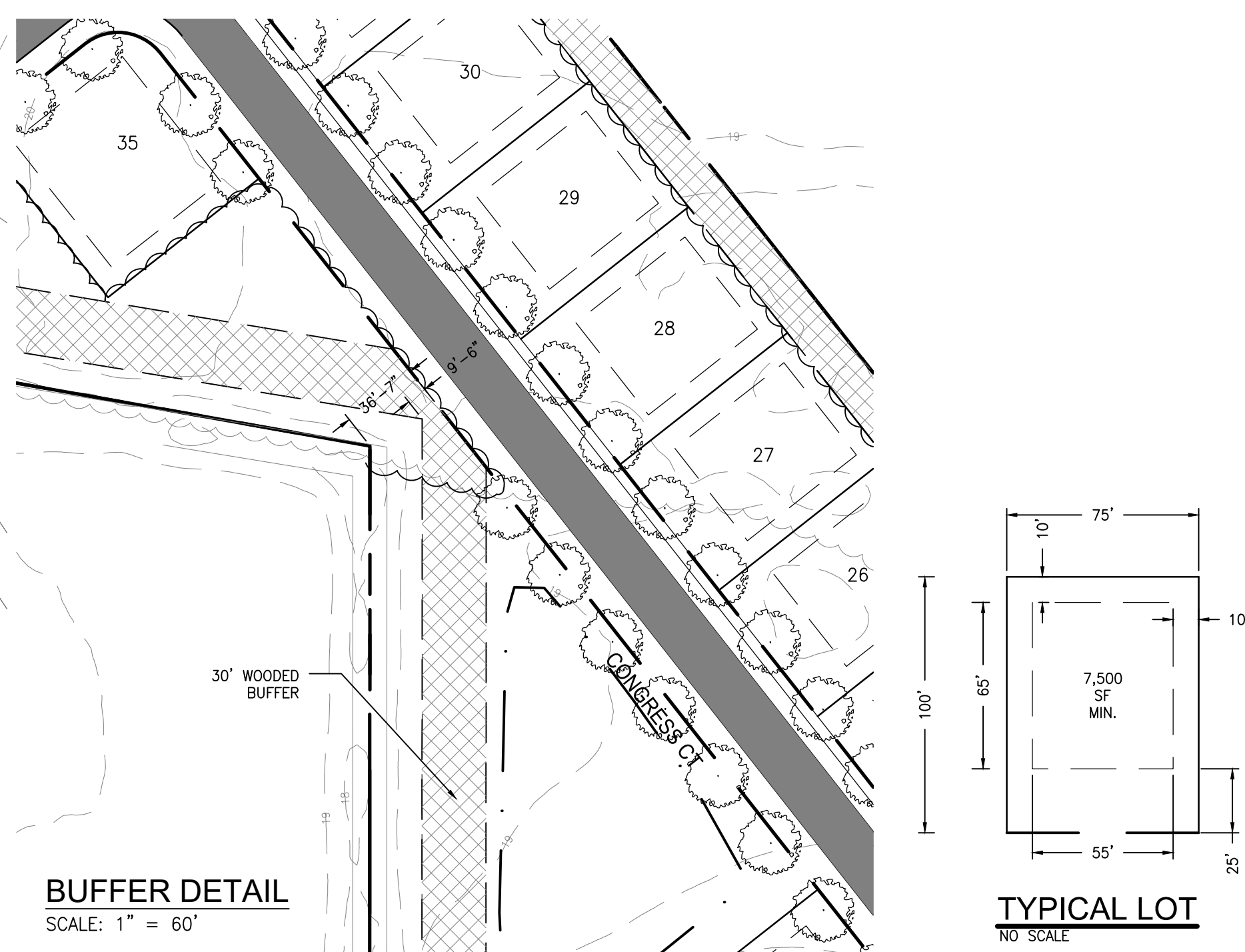
- NOTES:**
 TYPES OF BUFFERS WITHIN GOOD WILL FARM:
 1. 20' WIDE
 2. 30' WIDE
 3. EXISTING WOODED BUFFER TO REMAIN UNDISTURBED



1 1/2 BITUMINOUS CONCRETE TYPE "C" SURFACE COURSE OVER
 2 1/4" BITUMINOUS CONCRETE TYPE "B" BINDER COURSE OVER
 6" GRADED AGGREGATE TYPE "B" BASE COURSE OVER APPROVED SUBGRADE

- NOTE:**
1. PROVIDE 4" OF TOPSOIL COVERED WITH SEED AND MULCH ON PROPOSED GRASS AREAS.
 2. SUBBASE AND SUBGRADE SHALL BE COMPACTED TO 95% OF ASTM D1557, MODIFIED PROCTOR METHOD.
 3. SWALE DEPTH MAY BE INCREASED TO 2.5' AT ROADWAY CROSSINGS TO ACHIEVE ADEQUATE CULVERT COVER.
 4. HOT LAID BITUMINOUS CONCRETE SHALL BE IN ACCORDANCE WITH DEL-DOT STANDARD SPECIFICATION SECTION 401.

SUPER ELEVATED ROAD CROSS SECTION
 NO SCALE



BUFFER DETAIL
 SCALE: 1" = 60'

TYPICAL LOT
 NO SCALE

PRINTS ISSUED FOR: DRAWINGS STAGE

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PREPARED BY: **LAND PLANNING, LLC**
 32895 S. COASTAL HWY., SUITE 202
 TAGHART, MARYLAND, DELAWARE 19804
 BETHANY BEACH, DELAWARE 19802
 PHONE: (302) 539-2366

GMB
 GEORGE, MILES & BUHR, LLC
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 SALISBURY, MARYLAND 21801
 410-742-3115, FAX 410-548-5790
 www.gmbnet.com

GOOD WILL FARM
 SUSSEX COUNTY, DELAWARE

KEY SHEET - PROPOSED SITE PLAN

SCALE: 1" = 150'	SHEET NO.
DESIGN BY: JAC	PSP-3.0
DRAWN BY: RLM	
CHECKED BY:	
GMB FILE: 180157	
DATE: JAN 2019	

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C:\Projects\2019\180157\180157 - Main - Subdivision\Drawings\Working_Sets\180157-3.0 KEY SHEET - PROPOSED SITE PLAN.dwg, 1/11/2019 10:42 AM, Landon Myrick
 PEN=RED 0.01 INCHES (2.54mm) PEN=GREEN 0.01 INCHES (2.54mm) PEN=BLUE 0.01 INCHES (2.54mm) PEN=BLACK 0.01 INCHES (2.54mm)
 PEN=WHITE 0.01 INCHES (2.54mm) PEN=GRAY 0.01 INCHES (2.54mm) PEN=CYAN 0.01 INCHES (2.54mm) PEN=MAGENTA 0.01 INCHES (2.54mm)

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PEN-RED 1/8" = 1" (25mm) PEN-YELLOW 1/8" = 1" (25mm) PEN-GREEN 1/8" = 1" (25mm) PEN-BLUE 1/8" = 1" (25mm) PEN-MAGENTA 1/8" = 1" (25mm) PLOT CODE 1/8" = 1" (25mm) PLOT CODE 1/8" = 1" (25mm) PLOT CODE 1/8" = 1" (25mm) PLOT CODE 1/8" = 1" (25mm)

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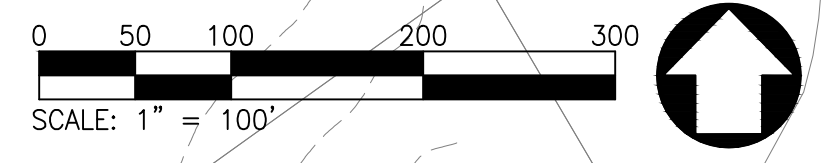
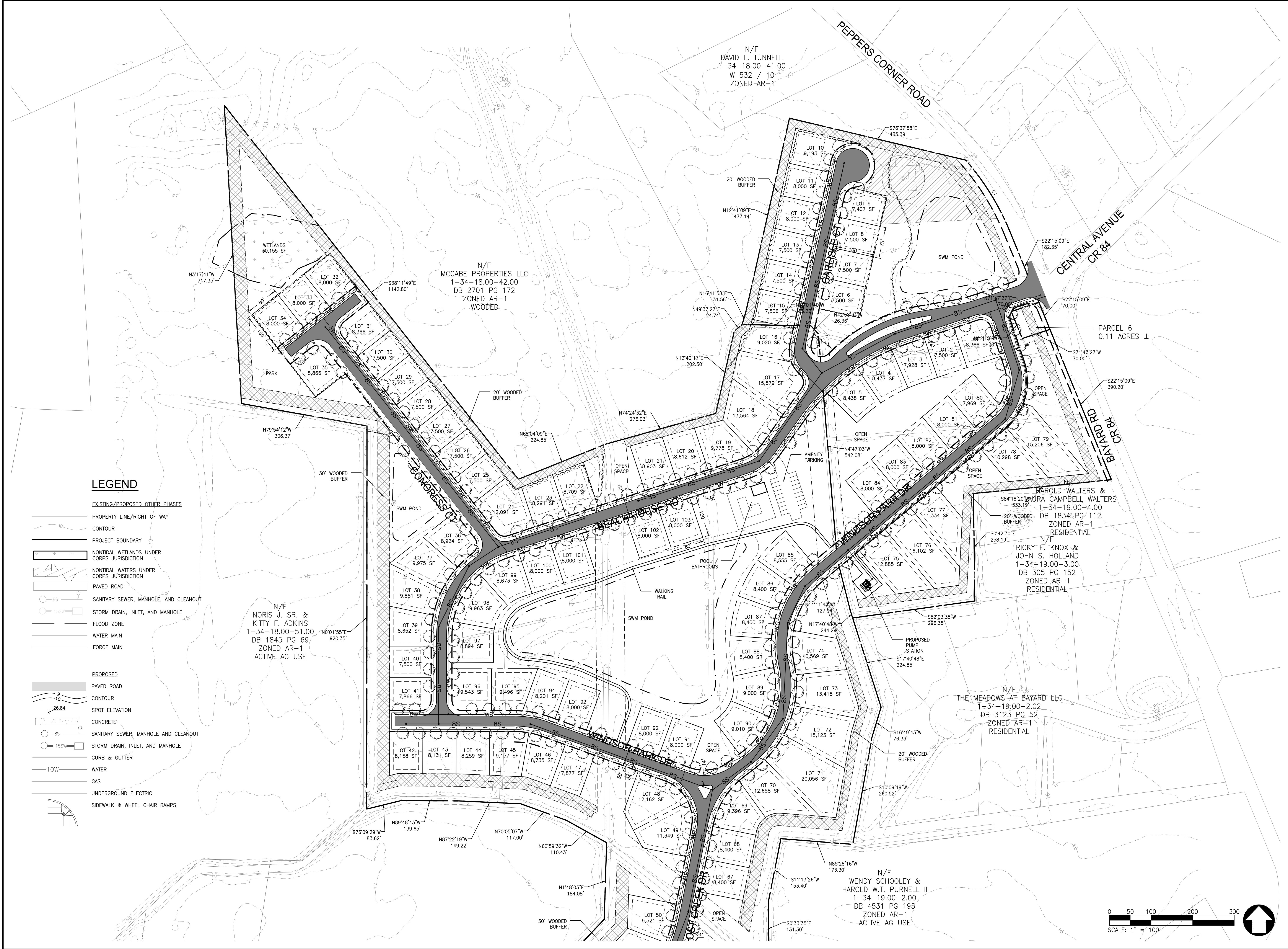
LEGEND

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- ▨ NONTIDAL WATERS UNDER CORPS JURISDICTION
- PAVED ROAD
- BS SANITARY SEWER, MANHOLE, AND CLEANOUT
- 15SW STORM DRAIN, INLET, AND MANHOLE
- FLOOD ZONE
- WATER MAIN
- FORCE MAIN

PROPOSED

- PAVED ROAD
- CONTOUR
- 26.84 SPOT ELEVATION
- CONCRETE
- BS SANITARY SEWER, MANHOLE AND CLEANOUT
- 15SW STORM DRAIN, INLET, AND MANHOLE
- CURB & GUTTER
- WATER
- GAS
- UNDERGROUND ELECTRIC
- SIDEWALK & WHEEL CHAIR RAMPS



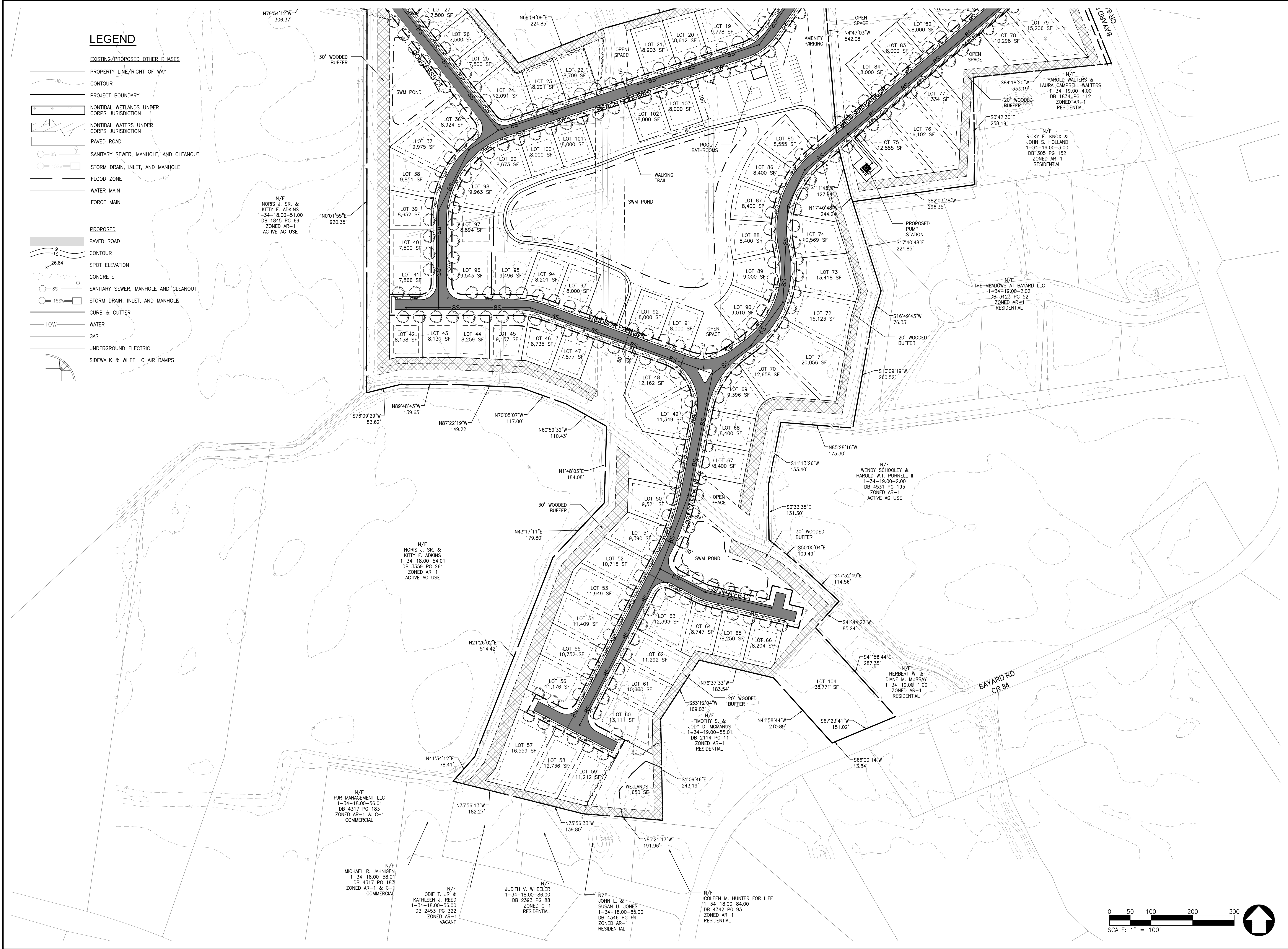
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REVISIONS	
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PREPARED BY: GMB TECH LAND PLANNING, LLC 32895 S. COASTAL HWY., SUITE 202 TAGCARTERS BEACH, DELAWARE 19801 PHONE: (302) 539-2366	
GEORGE, MILES & BUHR, LLC ARCHITECTS & ENGINEERS SALISBURY - BALTIMORE - SEAFORD 206 WEST MAIN STREET SALISBURY, MARYLAND 21801 www.gmbnet.com	
GOOD WILL FARM SUSSEX COUNTY, DELAWARE	
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DATE: JAN 2019	
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PEN-RED 200 INCHES (50mm) PEN-YELLOW 200 INCHES (50mm) PEN-ORANGE 200 INCHES (50mm) PEN-BLUE 200 INCHES (50mm) PEN-MAGENTA 200 INCHES (50mm) PEN-CYAN 200 INCHES (50mm) PEN-GREEN 200 INCHES (50mm) PEN-BLACK 200 INCHES (50mm) PEN-WHITE 200 INCHES (50mm)

LEGEND

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- FORCE MAIN
- PROPOSED
- PAVED ROAD
- CONTOUR
- SPOT ELEVATION
- CONCRETE
- SANITARY SEWER, MANHOLE AND CLEANOUT
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- WATER
- GAS
- UNDERGROUND ELECTRIC
- SIDEWALK & WHEEL CHAIR RAMPS



PRINTS ISSUED FOR: DRAWINGS STAGE

DATE	REVISIONS

PREPARED BY:

32865 S COASTAL HWY., SUITE 202
TAGGARTS BEACH, DELAWARE 19803
PHONE: (302) 539-2366

GEORGE, MILES & BUHR, LLC
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206 WEST MAIN STREET
SALISBURY, MARYLAND 21801
www.gmbnet.com

GOOD WILL FARM
SUSSEX COUNTY, DELAWARE

PROPOSED SITE PLAN

SCALE: 1" = 100' SHEET NO. PSP-3.2

DESIGN BY: JAC
DRAWN BY: RLM
CHECKED BY:
GMB FILE: 180157
DATE: JAN 2019

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DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

**PRELIMINARY
LAND
USE
SERVICE
(PLUS)
RESPONSE**



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

January 2, 2019

Constance C. Holland, AICP
Director, Office of State Planning Coordination
122 Martin Luther King Jr. Blvd. South – Haslet Armory, Third Floor
Dover, DE 19901

RE: PLUS Response 2018-07-07; Good Will Farm formerly known as Willow Run Subdivision

Dear Mrs. Holland:

Land Tech Land Planning, LLC represents the owner/developer of the above referenced proposed subdivision. In response to the review comments within the August 20, 2018 PLUS report that follows, **we offer our answers highlighted in color.**

August 20, 2018

Mr. Jeff Clark, RLA
Land Tech Land Planning, LLC
Taggart Professional Center
32895 South Coastal Highway, Suite 202
Bethany Beach, DE 19930

RE: PLUS review 2018-07-07; Willow Run Subdivision

Dear Mr. Clark:

Thank you for meeting with State agency planners on July 25, 2018 to discuss the Willow Run Subdivision project. According to the information received you are seeking review of a 100 unit subdivision on 44 acres along Bayard Road in Sussex County.

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

Acknowledged

Strategies for State Policies and Spending

This project represents land development that will result in 100 residential units in Investment Levels 3 and 4 according to the *2015 Strategies for State Policies and Spending*.

Investment Level 3 reflects areas where growth is anticipated by local, county, and state plans in the longer-term future, or areas that may have environmental or other constraints to development. State investments may support future growth in these areas, but please be advised that the State has other priorities for the near future.

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.

This project is primarily in Level 4. The State does not support growth in the Level 4; therefore, the State cannot support the development of this property.

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.**

We acknowledge that the *2015 Strategies for State Policies and Spending* plan maps this tract of land as Levels 3 and 4. However, we point out that Sussex County Council on December 4, 2018 adopted the 2018 Comprehensive Plan (2018 Plan) update that has a very different view for this property from a development standpoint. The Future Land Use component of the 2018 Plan has established Growth Areas where the County has signaled future growth is expected. The entire Good Will Farm subdivision site is mapped as Coastal Areas on the 2045 Future Land Use Map. Coastal Areas are one of seven (7) Growth areas defined and described in the 2018 Plan. The 2018 Plan seeks to encourage the County's most concentrated forms of new development to Growth Areas.

The 2019 Plan recognizes that the Coastal Growth Area is a region among the most desirable locations in Sussex County for new housing. Coastal Areas can accommodate development provided special environmental concerns are addressed and a range of housing types should be permitted including single-family homes which Good Will Farm subdivision proposes. Coastal Area development densities proposed in the 2018 Plan range from 2-12 homes per acre. Good Will Farm subdivision proposes less than 2 dwellings per acre. Cluster development is encouraged that results in permanent preservation of a substantial percentage of the tract or area being developed. Good Will Farm subdivision as planned preserves in excess of thirty percent (30%) open space as defined in the Sussex County Zoning Ordinance. Good Will Farm land use planning involves Best Management Practices (BMP's) in the storm water management design, preserves most of the existing woodlands on site, and proposes extensive buffers for wildlife habitat and nutrient (nitrogen & phosphorous) management. The Good Will Farm subdivision will be connected to the Sussex County regional wastewater collection, transmission and treatment facilities and the Tidewater Utilities regional potable and fire protection water system.

Code Requirements/Agency Permitting Requirements

Department of Transportation – Contact Bill Brockenbrough 760-2109

- The site access at the intersection of Bayard Road (Sussex Road 84), Central Avenue (also Sussex Road 84) and Peppers Corner Road (Sussex Road 365) 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>
Acknowledged
- Pursuant to Section P.3 of the Manual, a Pre-Submittal Meeting is required before plans are submitted for review.
Acknowledged
- 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.
Acknowledged
- Per Section 2.2.2.1 of the Development Coordination 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. The PLUS application states that the proposed development would generate 1,040 vehicle trip ends per day. DelDOT confirms that number and calculates that the development would generate 102 vehicle trip ends per hour during the evening peak hour on the adjacent roads. Therefore, a TIS is warranted.

A TIS scoping meeting with DelDOT staff was conducted on August 29, 2018. Traffic counts conducted by The Traffic Group, Inc. were submitted to DelDOT on August 30, 2018

and those counts were found acceptable by DelDOT in writing on September 12, 2018. On October 22, 2018, The Traffic Group submitted a Traffic Impact Study (TIS) for DelDOT review. As of this writing, no preliminary comments have been received from DelDOT for the TIS.

Per Section 2.2.2.2 of the Manual, developments generating fewer than 2,000 vehicle trip ends per day and fewer than 200 vehicle trip ends per hour in any hour of the day may be eligible to pay a fee, the Area Wide Study Fee, in lieu of doing a TIS. The fee is calculated as \$10 times the Average Daily Traffic volume shown on the site plan and is payable with the Initial Stage submission. Payment of the fee does not exempt the developer from responsibility to make off-site improvements or from preparing a Traffic Operational Analysis (TOA) if DelDOT identifies a need for a TOA in the plan review process.

DelDOT will require a TOA for this development to examine the need for improvements at the site entrance. DelDOT presently anticipates requiring a minor realignment of Central Avenue to create a right-angle intersection. The appropriate configuration of the intersection and the traffic control needed there will be the subject of the TOA.

Acknowledged

- Section 3.2.4.2 of the Manual addresses the placement of right-of-way monuments (markers) along the roads on which a property fronts, in this case Bayard Road and Peppers Corner Road. Monuments sufficient to re-establish the permanent rights-of-way after the dedication discussed below should be shown on the plan and provided in the field in accordance with this section.

Acknowledged

- 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 Bayard Road and Peppers Corner Road to meet DelDOT's standards for collector roads and local roads, respectively. By this regulation, this dedication is to provide a minimum of 40 feet of right-of-way from the physical centerline along Bayard Road and 30 feet of right-of-way from the physical centerline along Peppers Corner Road. 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."**

Acknowledged

- In accordance with Section 3.2.5.1.1 of the Manual, if this development is proposing a neighborhood sign/structure, then a permanent easement shall be established at the site 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.

Acknowledged

- In accordance with Section 3.2.5.1.2 of the Manual, DelDOT will require the establishment of 15-foot wide permanent easements across the property frontage on both Bayard Road and Peppers Corner Road. The location of the easements 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.**”

Acknowledged

- In accordance with Section 3.4 of the Manual, 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 available on the DelDOT website at <https://www.deldot.gov/Business/subdivisions/pdfs/Critical-Items-Record-Subdivision.pdf?09222017>.

Acknowledged

- Referring to Section 3.4.2.1 of the Manual, the following items, among other things, are required on the Record Plan:
 - A Traffic Generation Diagram. See Figure 3.4.2-a for the required format and content.
 - Depiction of all existing entrances within 450 feet of the proposed entrance on Bayard Road and within 600 feet of the proposed entrance on Peppers Corner Road.
 - Notes identifying the type of any off-site improvements, agreements (signal, letter) contributions and when the off-site improvements are warranted.

Acknowledged

- 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. Private or municipal streets should follow the County’s requirements for connectivity.

Acknowledged

- Section 3.5.4.2 of the Manual addresses requirements for shared-use paths and sidewalks. Referring to Section 3.5.4.2.A of the Manual, in Level 3 and 4 Investment Areas, installation of a sidewalk or Shared Use Path along the development’s road frontage is at the discretion of DelDOT’s Subdivision Engineer. Because there is significant development activity along Central Avenue, DelDOT will require a Shared Use Path along the development frontage on both Bayard Road and Peppers Corner Road and anticipates requiring crosswalks at the site entrance intersection.

Acknowledged

- 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.

Acknowledged

- Section 3.5.4.4 of the Manual addresses access-ways, which are similar to Shared Use Paths (SUP) but are used to connect from an SUP or sidewalk along a road to an interior trail or subdivision street when the spacing between streets is inadequate to accommodate convenient pedestrian and bicycle travel. DelDOT anticipates requiring an access-way from the south site frontage on Bayard Road to the cul de sac proposed near it.

Acknowledged

- 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 Bayard Road and Peppers Corner Road.

Acknowledged

- Referring to Section 4.3 of the Manual, an entrance plan shall be prepared prior to issuing entrance approval. The entrance plan submittal shall include the items listed on the Critical Items for Acceptance: Entrance/Construction/Subdivision Set Plan document available on the DelDOT website at https://www.deldot.gov/Business/subdivisions/pdfs/Critical-Items_Entrance_Construction_Subdivision.pdf?09222017.

Acknowledged

- In accordance with Section 5.2.5.6 of the Manual, a separate turning template plan shall be provided to verify vehicles can safely enter and exit the site entrance. As per Section 5.2.3 of the Manual, the entrance shall be designed for the largest vehicle using the entrance.

Acknowledged

- 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>.

Acknowledged

- In accordance with Section 5.4 of the Manual, sight distance triangles are required and shall be established in accordance with American Association of State Highway and Transportation Officials (AASHTO) standards. A spreadsheet has been developed to assist with this task. It can be found at <http://www.deldot.gov/Business/subdivisions/index.shtml>.

Acknowledged

- 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.

Acknowledged

- Because the proposed development would not have State-maintained streets, Section 6.4.3 of the Manual, which pertains to the inspection and acceptance of commercial entrances, applies. Construction inspection responsibilities shall be in accordance with Figure 6.4.3-a. DeDOT's preliminary reading of this figure is that the project requires Level I inspection and that a construction inspection agreement will not be needed.

Acknowledged

- Section 7.7.2 of the Manual addresses the need to provide 20-foot wide drainage easements for all storm drainage systems, open or closed, that fall outside the existing right-of-way or the drainage/utility easement. In accordance with this section, metes and bounds and total areas need to be shown for any drainage easements. The easements should be shown and noted on the record plan.

Acknowledged

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

Solid and Hazardous Waste

- One of the parcels (#134-19.00-6.00) had leaking underground storage tanks on it in the past when it was occupied by Blue Hen Market (Facility ID #5-000946). A “No further action required” letter issued on November 27, 2001. The letter, which contains conditions when disturbing the soil, can be found on the Delaware Environmental Navigator thru this link: <https://apps.dnrec.state.de.us/dochandler/handler.ashx?docid=8a8a81ef37b6a22c0137c17078e919b5>

A Phase 1 Environmental Site Assessment Report for the Good Will Farm property was prepared by Watershed Eco dated November 26, 2018. The report acknowledges the Blue Hen Market contaminated soils and recommends that any soil disturbances in the area of the former market be managed per a plan submitted in advance to DNREC. The Phase 1 ESA further recommends the removal of on-site home heating oil tanks and to properly abandon any well(s) or septic system(s) associated with the vacant residence or store site.

State Historic Preservation Office – Contact Carlton Hall 736-7404

- There are no known archaeological sites or known National Register listed or eligible properties on the parcel.
- If any project or development proceeds, the developer should be aware of the Unmarked Human Burials and Human Skeletal Remains Law (Del. C. Title 7, Ch. 54).

If there is a discovery of unmarked graves, burials or a cemetery, the Division of Historical & Cultural Affairs recommends that the plans be re-drawn to leave the full extent of the cemeteries or any burials on its own parcel or in the open space area of the development, with the responsibility for its maintenance lying with the landowner association or development.

For more information, please review the following websites:

www.history.delaware.gov/preservation/umhr.shtml and

www.history.delaware.gov/preservation/cemeteries.shtml

- 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 more information on the Section 106 process please review the Advisory Council on Historic Preservation's website at the following:

www.achp.gov

Acknowledged

Delaware State Fire Marshall's Office – Contact Duane Fox 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.
- Acknowledged**
- 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 the main thoroughfare must be constructed so fire department apparatus may negotiate it. If a "center island" is placed at an entrance into the subdivision, it shall be arranged in such a manner that it will not adversely affect quick and unimpeded travel of fire apparatus into the subdivision. Where traffic circles (round-abouts) are located in the subdivision, they too are to be arranged in such a manner that they will not adversely affect quick and unimpeded travel of fire apparatus throughout the subdivision. 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 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.

Acknowledged

- Gas Piping and System Information:
 - Provide type of fuel proposed, and show locations of bulk containers on plan.

Acknowledged

- 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

Acknowledged

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,

Dorothy L Morris for Constance C. Holland, AICP
Director, Office of State Planning Coordination

CC: Sussex County

Sincerely,
Land Tech Land Planning, LLC

Jeffrey A. Clark, RLA
jeff@landtechllc.com

file: goodwillfarmplusresp.ltr
enclosures: none
cc: Sussex County Planning & Zoning Department

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

**TRAFFIC IMPACT STUDY
&
SUPPLEMENTAL DATA**

PLANNING & ZONING

JANELLE M. CORNWELL, AICP
DIRECTOR

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



Sussex County

DELAWARE
sussexcountyde.gov

Service Level Evaluation Request Form

This form **shall** be submitted to the Planning and Zoning Office and a response **shall** be received back from DelDOT prior to the applicant being able to submit an application to the Planning and Zoning Office.

Date: 8/13/18

Site Information:

Site Address/Location: 34966 Bayard Road; Frankford, DE 19945

Tax Parcel Number: 134-18.00-55.00 and 134-19.00-5.00 & 6.00

Current Zoning: AR-1

Proposed Zoning: AR-1

Land Use Classification: AR-1 Cluster Subdivision

Proposed Use(s): Single family dwelling lots with min. 7,500
sf each on 56.41 acres

Square footage of any proposed buildings or number of units: One hundred (100) lots

Applicant Information:

Applicant's Name: Gulfstream Development, LLC

Applicant's Address: 27 Atlantic Avenue, Suite 101

City: Ocean View State: DE Zip Code: 19970

Applicant's Phone Number: (302) 539-6178

Applicant's e-mail address: rjh@gulfstreamde.net





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

JENNIFER COHAN
SECRETARY

September 4, 2018

Ms. Janelle Cornwell, Director
Sussex County Planning & Zoning
P.O. Box 417
Georgetown, DE 19947

Dear Ms. Cornwell:

The Department has completed its review of a Service Level Evaluation Request for the **Gulfstream Development, LLC** conditional use application, which we received on August 14, 2018. This application is for a 56.61-acre assemblage of parcels (Tax Parcels: 134-18.00-55.00, 134-19.00-5.00 & 6.00). The subject land is located on the west side of Peppers Corner Road (Sussex Road 365) and Bayard Avenue (Sussex Road 84), opposite Central Avenue (Sussex Road 84). The subject land is currently zoned as AR-1 (Agricultural Residential), and the applicant is seeking a conditional use approval to development 100 single-family detached houses.

Per the 2017 Delaware Vehicle Volume Summary, the annual average daily traffic volume along Peppers Corner Road where the subject land is located, which is from Bayard Road (Sussex Road 84) to Beaver Dam Road, is 1,790 vehicles per day. As the subject land also has frontage along Bayard Road, the annual average daily traffic along that road segment, which is from Daisey Road (Sussex Road 370) to Peppers Corner Road, is 5,805 vehicles per day.

Based on our review, we estimate that the proposed land use will generate more than 50 vehicle trips per a weekly peak hour or 500 vehicle trips per day, and would be considered to have a Minor impact to the local area roadways. In this instance, the Department considers a Minor impact to be when a proposed land use would generate more than either 50 vehicle trips per a weekly peak hour and / or 500 vehicle trips per day but less than 200 vehicle trips per a weekly peak hour and 2,000 vehicle trips per day. Because of this impact, we recommend that the applicant be required to perform a Traffic Impact Study (TIS) for the subject application. However, our Development Coordination Manual provides that where a TIS is required only because the volume warrants are met, and the projected trip generation will be less than 200 vehicle trips per a weekly peak hour and less than 2,000 vehicle trips per day, DelDOT may permit the developer to pay an Area-Wide Study Fee of \$10 per daily trip in lieu of doing a TIS. For this application, if the County were agreeable, we would permit the developer to pay an Area-wide Study Fee.



Ms. Janelle M. Cornwell
Page 2 of 2
September 4, 2018

According to the Institute of Transportation Engineers (ITE) Trip Generation Manual, a development of 100 single-family detached houses would generate 1,040 vehicle trips per day, 76 vehicle trips during the morning peak hour, and 102 vehicle trips during the afternoon peak hour. As stated above, because this development would generate fewer than 2,000 vehicle trips per day and fewer than 200 vehicle trips during a weekly peak hour, the applicant has the option to pay the Area-Wide Study Fee in lieu of doing a TIS. The Area-Wide Study Fee for the proposed development would be \$10,400.00. Payment of the Area-Wide Study Fee does not relieve a developer from having to make or participate in off-site improvements.

On August 20, 2018, DelDOT met with the applicant for a TIS scoping meeting during which the applicant chose the option of conducting a TIS for the proposed development. DelDOT issued a TIS scope of work on August 29, 2018. A copy of the scope of work is enclosed with this letter.

Please contact Mr. Claudy Joinville, at (302) 760-2124, if you have questions concerning this correspondence.

Sincerely,



T. William Brockenbrough, Jr.
County Coordinator
Development Coordination

TWB:cjm
Enclosure

cc: Constance C. Holland, Coordinator, Cabinet Committee on State Planning Issues
Gulfstream Development, LLC, Applicant
J. Marc Coté, Assistant Director, Development Coordination
Gemez Norwood, South District Public Works Manager, Maintenance and Operations
Steven Sisson, Sussex County Subdivision Coordinator, Development Coordination
Derek Sapp, Subdivision Manager, Development Coordination
Brian Yates, Subdivision Manager, Development Coordination
Susanne Laws, Subdivision Manager, Development Coordination
Troy Brestel, Project Engineer, Development Coordination
Claudy Joinville, Project Engineer, Development Coordination



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

JENNIFER COHAN
SECRETARY

MEMORANDUM

TO: File

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

DATE: August 29, 2018

SUBJECT: Willow Run
Traffic Impact Study (TIS) - Scoping Meeting (08/20/18)
Scope of Work

ATTENDANCE: Doug Bolner, George, Miles & Buhr
Betty Tustin, The Traffic Group, Inc.
Jeff Clark, Land Tech Land Planning, LLC
Robert Harris, Developer
Steve Sisson, DelDOT Planning
Brian Yates, DelDOT Planning
T. William Brockenbrough, DelDOT Planning
Claudy Joinville, DelDOT Planning

Background and Discussion

Gulfstream Development, LLC seeks to develop up 100 single-family detached houses on an approximately 56.61-acre assemblage of parcels (Tax Parcels: 134-18.00-55.00, 134-19.00-5.00 & 6.00).

The land is located on the west side of Peppers Corner Road (Sussex Road 365), opposite Central Avenue (Sussex Road 84), in Sussex County. The land is currently zoned as AR-1 (Agricultural Residential), and the developer plans to develop under the County's AR-1 Cluster option.

One full access point is proposed along Peppers Corner Road, directly opposite Central Avenue. Construction is anticipated to be complete in 2022.

Cases to be Evaluated

The study shall evaluate the weekday morning and weekday evening peak hours for the following situations:

- 1) Existing (2018);
- 2) 2022 without development; and
- 3) 2022 with development.

Facilities to be Evaluated

The TIS should evaluate conditions at the following intersection for capacity and level of service using the Highway Capacity Software (HCS). It should also evaluate the extent to which it meets the relevant DelDOT, AASHTO and MUTCD standards for geometry and traffic control devices.

- 1) Site Entrance / Peppers Corner Road (Sussex Road 365)

Traffic Counts

The Consultant should conduct traffic counts for the intersection listed above from 7:00 a.m. to 9:00 a.m. and from 4:00 p.m. to 6:00 p.m., on a Tuesday, Wednesday or Thursday to determine when the peaks occur.

Additionally, an Automatic Traffic Recorder (ATR) should be used to collect traffic data on Peppers Corner Road near the area of the proposed site entrance. The ATR should be placed for a one-week time period that includes the date(s) of the manual traffic counts. The ATR data will be used to verify the manual counts and determine whether adjustments are required.

Section 2.2.8.5, item 19, under Existing Traffic and Transportation Conditions in the Development Coordination Manual addresses how oversaturated intersections are to be counted.

The traffic counts should be submitted to DelDOT both electronically as Portable Document Format (PDF)/Excel files and as draft report figures showing peak hour volumes (labeled with date and peak hour interval) posted on diagrams of the road network.

The Consultant should include counts of pedestrians, a separate count of right-turn on red (in addition to right-turn movement counts), and a separate count of heavy vehicles.

The Consultant should be alert for events affecting the traffic counts, such as accidents or nearby construction and shall make note of any such events when submitting the counts. As necessary, DelDOT reserves the right to reject the counts or require adjustments to them.

Trip Generation

The Consultant shall use the 10th edition of the ITE Trip Generation Manual in generating trips for this development.

Trip Distributions

A trip distribution to be used for the site is attached.

Growth Factors

The Consultant shall apply growth factors to the traffic counts. DelDOT will develop those factors after we receive the Consultant's traffic counts.

The Consultant should also determine what portions of the following developments were complete at the time of any traffic counts to be used in the study and shall add in projected traffic from any unbuilt portions. The following information on the amount and types of development associated with these projects is tentative and should be verified with Sussex County and the Town of Millville.

- 1) Millers Creek (*east side of Central Avenue, north of Old Cemetery Road*) (171 multi-family houses)
- 2) Lakelynn's (*northeast corner of the intersection of Peppers Corner Road*) (200 single-family detached houses)
- 3) Millville by the Sea (*south side of Burbage Road, east and west sides of Substation Road – Town of Millville*) (91 single-family detached houses, 84 townhouses)
- 4) Silverwoods a.k.a. Starlight Woods (*south side of Beaver Dam Road, east of Central Avenue – Sussex County*) (*units to be specified from Sussex County*)
- 5) Estuary (*Sussex County*) (631 single-family detached houses)

Highway Capacity Software

The Consultant shall use the most recent version of the Highway Capacity Software (HCS) that implements the 6th Edition of the Highway Capacity Manual (HCM). Presently, that is HCS7.

Seasonal Adjustment Factors for the roads in the study area are as follows:

Roads	July	August	September
Central Avenue (Sussex Road 84)	0.94	0.92	0.96
Peppers Corner Road (Sussex Road 365)	0.94	0.92	0.96
All Other Roads	1.00	1.00	1.00

DelDOT Projects

Currently, there are no DelDOT projects within the study area.

Transit, Bicycle, and Pedestrian Facilities

The study should describe the existing and proposed transit service in the project area and should also describe the existing and needed transit, bicycle, and pedestrian facilities on or near the project site. In determining these items, the Consultant shall contact Mr. David Dooley, a Service Development Planner at the Delaware Transit Corporation (DTC), and Mr. Anthony Aglio, of DeIDOT's Statewide and Regional Planning Section. Mr. Dooley may be reached at (302) 576-6064. Mr. Aglio may be reached at (302) 760-2509.

General Notes

- 1) All submissions relating to this study should be made electronically via the Planning and Development Coordination Application (PDCA), preferably in Portable Document Format (PDF).
- 2) The Consultant is advised to read Chapter 2 in the Development Coordination Manual carefully, as our regulations have changed. A current version is available on our website at the following link: <https://deldot.gov/Business/subdivisions/index.shtml?dc=changes>.
- 3) The Consultant should e-mail DeIDOT's Transportation Management Center (TMC) at tmcl@state.de.us to obtain advance approval for the use of any signal timings.
- 4) The Consultant should contact Ms. Kari Glanden, of DeIDOT's Traffic Safety Section, for crash data within the study area. The Consultant shall report on this data and make recommendations for improvements if safety problems exist in the study area. Ms. Glanden may be reached at (302) 659-4069.
- 5) The Consultant should e-mail DeIDOT's Transportation Management Center (TMC) at tmcl@state.de.us before installing ATRs to notify the TMC of the time, location and duration the ATRs will remain installed. The Consultant should provide contact information for the person to reach in the event of an equipment failure or other problem.
- 6) Both DeIDOT and Sussex County reserve the right to change this scope of work if the study is not performed within a reasonable time.
- 7) The developer may choose to have DeIDOT's Consultant perform the TOA rather than use their own Consultant. If this option is of interest, the developer should contact me at (302) 760-2167 to request a cost estimate.

Memorandum to File
August 29, 2018
Page 5 of 5

- 8) By copy of this memorandum I ask those copied to contact me at (302) 760-2124 regarding any significant errors or omissions.

CJ:cjm

Enclosure

cc: Janelle Cornwell, Director, Sussex County Planning and Zoning
Drew Boyce, Director, Planning
Michael Simmons, Assistant Director for Project Development South, DOTS
J. Marc Coté, Assistant Director, Development Coordination
Peter Haag, Traffic Studies Manager, Traffic, DOTS
Alastair Probert, South District Engineer, DOTS
Gemez Norwood, South District Public Works Supervisor, DOTS
William Kirsch, South District Permit Supervisor, DOTS
Derek Sapp, Subdivision Manager, Development Coordination
Troy Brestel, Project Engineer, Development Coordination
David Dooley, Service Development Planner, Delaware Transit Corporation
Anthony Aglio, Statewide & Regional Planning
Kari Glanden, Statistical Information Supervisor, DeIDOT Traffic, DOTS
Mark Galipo, Traffic Engineer, DeIDOT Traffic, DOTS
Andrew Parker, McCormick & Taylor, Inc.
Mir Wahed, Johnson, Mirmiran, & Thompson, Inc.

PM Peak Distribution / Assignment
August 29, 2018

Willow Run TOA
Trip Generation
100 Single-family Detached (ITE 10 LUC 210)

	IN	OUT
Weekday ADT	520	520
PM Peak	64	38



Willow Run

Note: Figure Not Drawn to Scale

Legend

- State-maintained road
- Site Entrance
- Traffic lost / gained before intersections
- State-maintained Intersections
- Inbound Trips
- Outbound Trips



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

JENNIFER COHAN
 SECRETARY

September 12, 2018

Ms. Betty Tustin
 The Traffic Group, Inc.
 104 Kenwood Court
 Berlin, MD 21811

Dear Ms. Tustin:

We have reviewed the traffic counts and trip distributions that we received on August 31, 2018 for the **Willow Run** (Tax Parcels 134-18.00-55.00, 134-19.00-5.00 & 6.00) traffic impact study (TIS). Upon our review, we find that the traffic counts and trip distributions are acceptable as submitted.

Considering background growth factors, please apply the following growth factors to the seasonally adjusted traffic volumes in developing future traffic:

<u>Road</u>	<u>Growth Factor</u>	<u>Total Growth from 2018 to 2022</u>
Central Avenue (Sussex Road 84)	1.01	1.041
Peppers Corner Road (Sussex Road 365)	1.01	1.041
All Other Roads	1.00	1.00

You may contact Mr. Troy Brestel at (302) 760-2167 if you have any questions concerning this correspondence.

Sincerely,

T. William Brockenbrough, Jr.
 County Coordinator

TWB:tbm

cc: Janelle Cornwell, Sussex County Planning and Zoning
 J. Marc Coté, Assistant Director, Development Coordination
 Troy Brestel, Project Engineer, Development Coordination
 Claudy Joinville, Project Engineer, Development Coordination



Good Will Farm

(fka Willow Run)

Sussex County, Delaware

October 22, 2018

Traffic Impact Study

Prepared for:

Gulf Stream Development, LLC

27 Atlantic Avenue

Suite 101

Ocean View, Delaware 19970



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APPENDICES

APPENDIX A – Intersection Turning Movement Counts and Aerial Photographs

APPENDIX B – Crash Data

APPENDIX C – Committed Development Worksheets

APPENDIX D – Intersection Capacity Analysis Worksheets

APPENDIX E – Correspondence

Prepared by: Betty H. Tustin, P.E., PTOE
Qiang Tian, P.E., PTOE

BHT:mlj
(F:\2018\2018-0733_Willow Run\DOCS\REPORTS\TIS.docx)

The Traffic Group, Inc. ®
Traffic Engineers & Transportation Planners

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1-800-583-8411
www.trafficgroup.com

EXECUTIVE SUMMARY

Gulfstream Development, LLC seeks to develop 104 single family detached houses on an approximately 56.61-acre assemblage of parcels (Tax Parcels 134-18.00-55.00, 134-19.00-5.00 and 6.00). The property is zoned AR-1 (Agricultural Residential) and no change in zone is desired.

The land is located on the west side of Peppers Corner Road (Sussex Road 365) opposite Central Avenue (Sussex Road 84) in Sussex County, Delaware. Of the 104 single family homes, 103 will be provided one full access is proposed along Peppers Corner Road, opposite of Central Avenue, creating a four-leg STOP controlled intersection. The 104th home will have access directly onto Bayard Road. Construction is anticipated to be completed in 2022.

Based on the minutes of the Scoping Meeting, dated August 29, 2018, the following intersection was included in the Traffic Impact Study.

- Peppers Corner Road (Sussex Road 365) and Site Access/Central Avenue

The Minutes of the Scoping Meeting identified the following committed developments in the study area to be included in the Traffic Impact Study.

1. Millers Creek
2. Lakelynns
3. Millville by the Sea
4. Silverwoods
5. Estuary

Currently, there are no DelDOT projects within the study area.

The study intersection was evaluated utilizing the intersection capacity analyses methodology identified in the Highway Capacity Manual, which is incorporated by the Highway Capacity Software, Version 7.6. All approaches to the study intersection are projected to operate at acceptable Levels of Service (LOS B or better) for future peak hour traffic conditions.

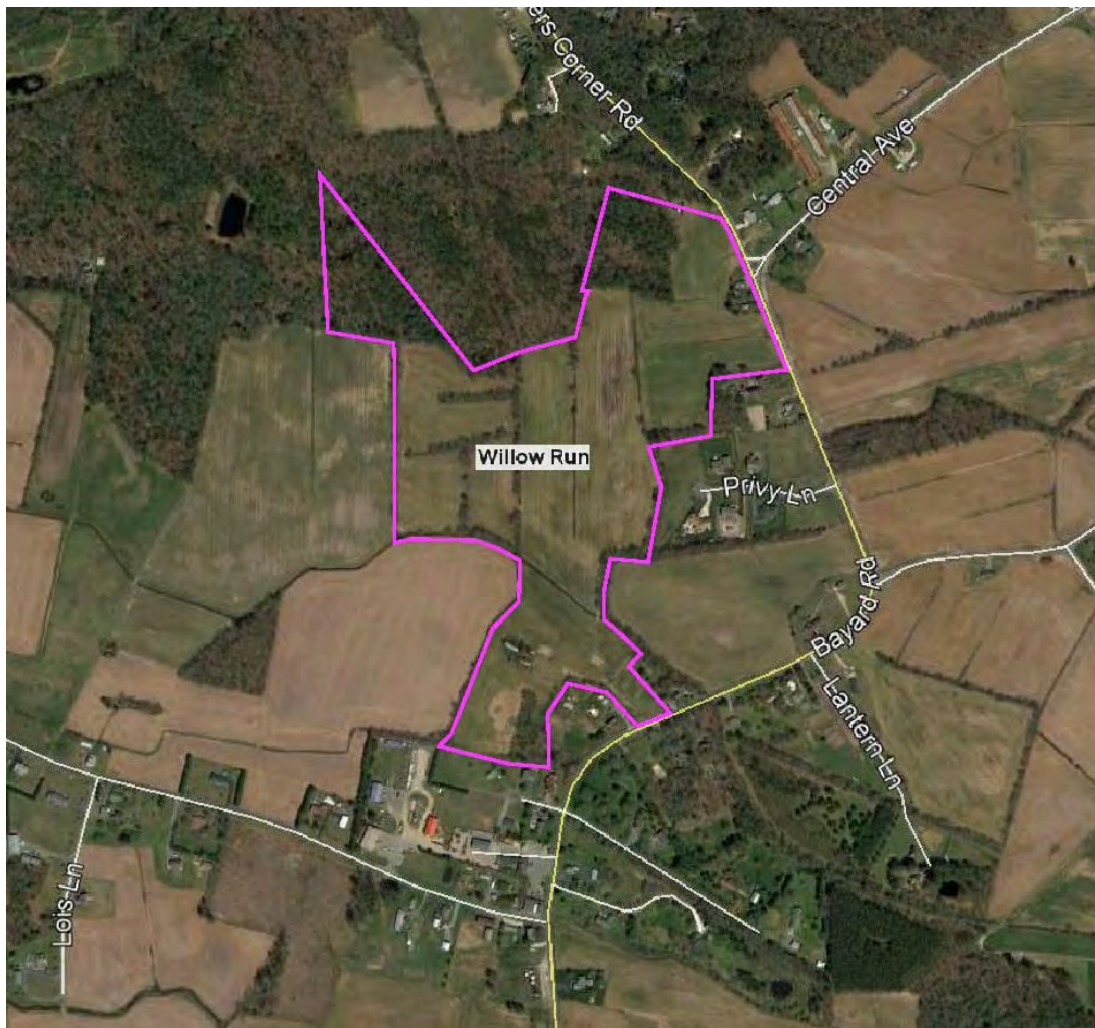
SITE INFORMATION

Developer: Gulfstream Development, LLC
27 Atlantic Avenue
Suite 101
Ocean View, Delaware 19907

Lot Location: Tax Parcels 134-18.00-55.00, 134-19.00-5.00 and 6.00

Routes of access: Peppers Corner Road (Sussex Road 365)

Size and type and zoning: 56.61 acres +/-
AR-1 (Agricultural Residential)



PROJECT DESCRIPTION

Gulfstream Development seeks to develop 104 single family detached houses on an approximately 56.61-acre assemblage of parcels (Tax Parcels 134-18.00-55.00, 134-19.00-5.00 and 6.00). The property is zoned AR-1 (Agricultural Residential) and no change in zone is desired.

The land is located on the west side of Peppers Corner Road (Sussex Road 365) opposite Central Avenue (Sussex Road 84) in Sussex County, Delaware. Please see Exhibit 1. Of the 104 single family homes, 103 will be provided one full access is proposed along Peppers Corner Road, opposite of Central Avenue, creating a four-leg STOP controlled intersection. The 104th home will have access directly onto Bayard Road. Construction is anticipated to be completed in 2022.

A site location map is provided in Exhibit 1 and a concept plan is provided in Exhibit 1A.

STUDY AREA

As discussed in the minutes of the Scoping Meeting, dated August 29, 2018 (copy contained in Appendix E), the following intersection was evaluated for capacity and level of service using the Highway Capacity Software (HCS 7.6) 6th edition.

- Peppers Corner Road (Sussex Road 365) and Central Avenue (Sussex Road 84)/Site Access



At this 3-leg STOP controlled intersection, the lane configuration is as follows.

Northbound: Shared Through/Right Turn Lane

Southbound: Shared Through/Left Turn Lane

Westbound: Left Turn Lane and Right Turn Lane

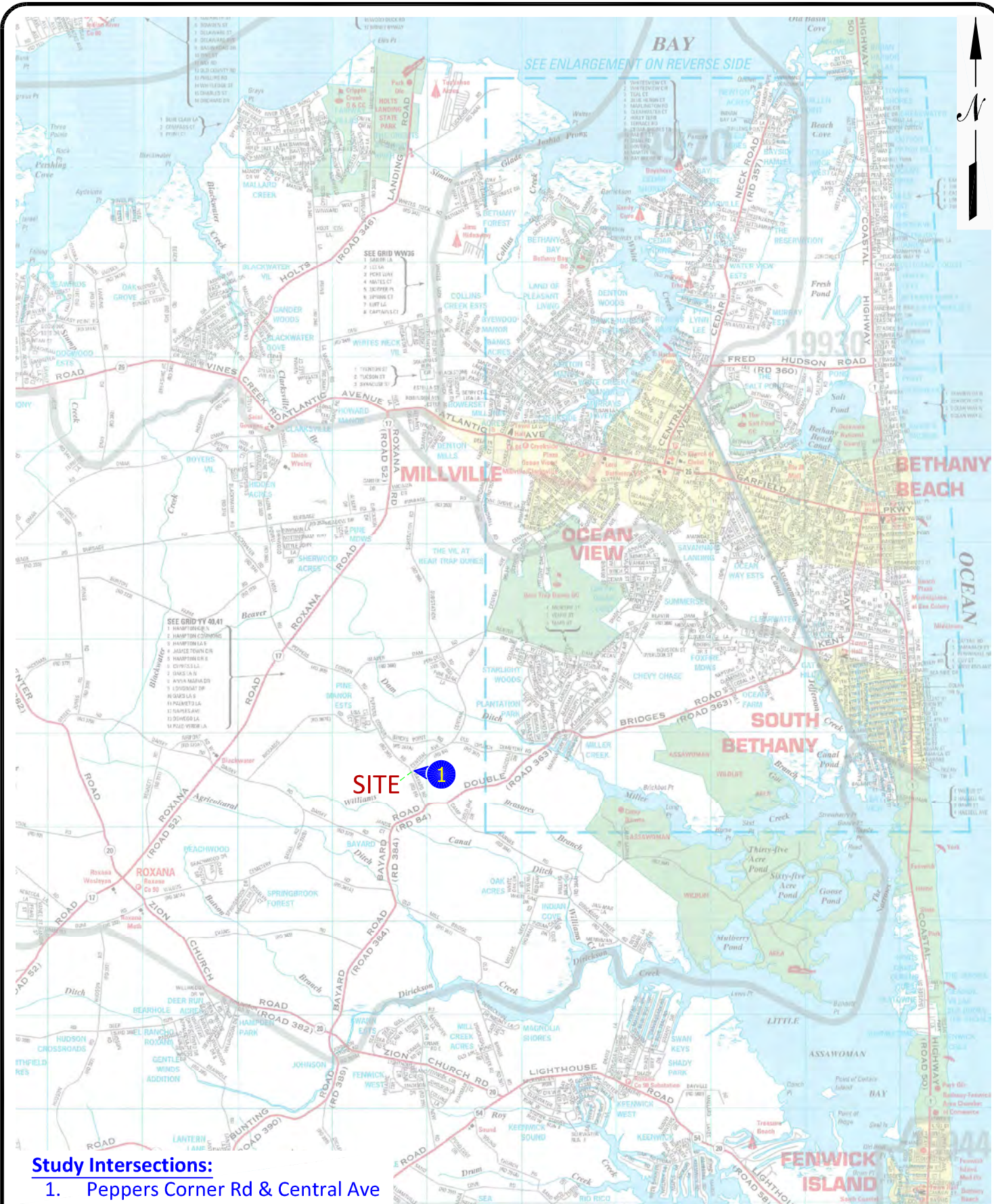
In the study area, Peppers Corner Road is a two-lane roadway, classified as a Local Road north of Central Avenue and a Minor Collector south of Central Avenue with a posted speed limit of 50 mph in the study area. According to the 2017 Delaware Volume Counts the AADT is 1,790 north

of Central Avenue and 5,805 south of Central Avenue. Within the study area, Peppers Corner Road generally consists of a 20 foot +/- paved surface with grass shoulders.

In the study area, Central Avenue is a two-lane roadway, classified as a Minor Collector with a posted speed limit of 40 mph. According to the 2017 Delaware Volume Counts the AADT on Central Avenue is 2,472 in the study area. Central Avenue generally consists of a 20 foot +/- paved surface with grass shoulders within the study area.

The study intersection generally appears to meet the relevant DeIDOT, AASHTO, and MUTCD standards for geometrics and traffic control with the exception that a STOP BAR should be provided on Central Avenue in the left turn lane.

Existing Lane Use and Traffic Control are provided in Exhibit 2.



Study Intersections:
 1. Peppers Corner Rd & Central Ave




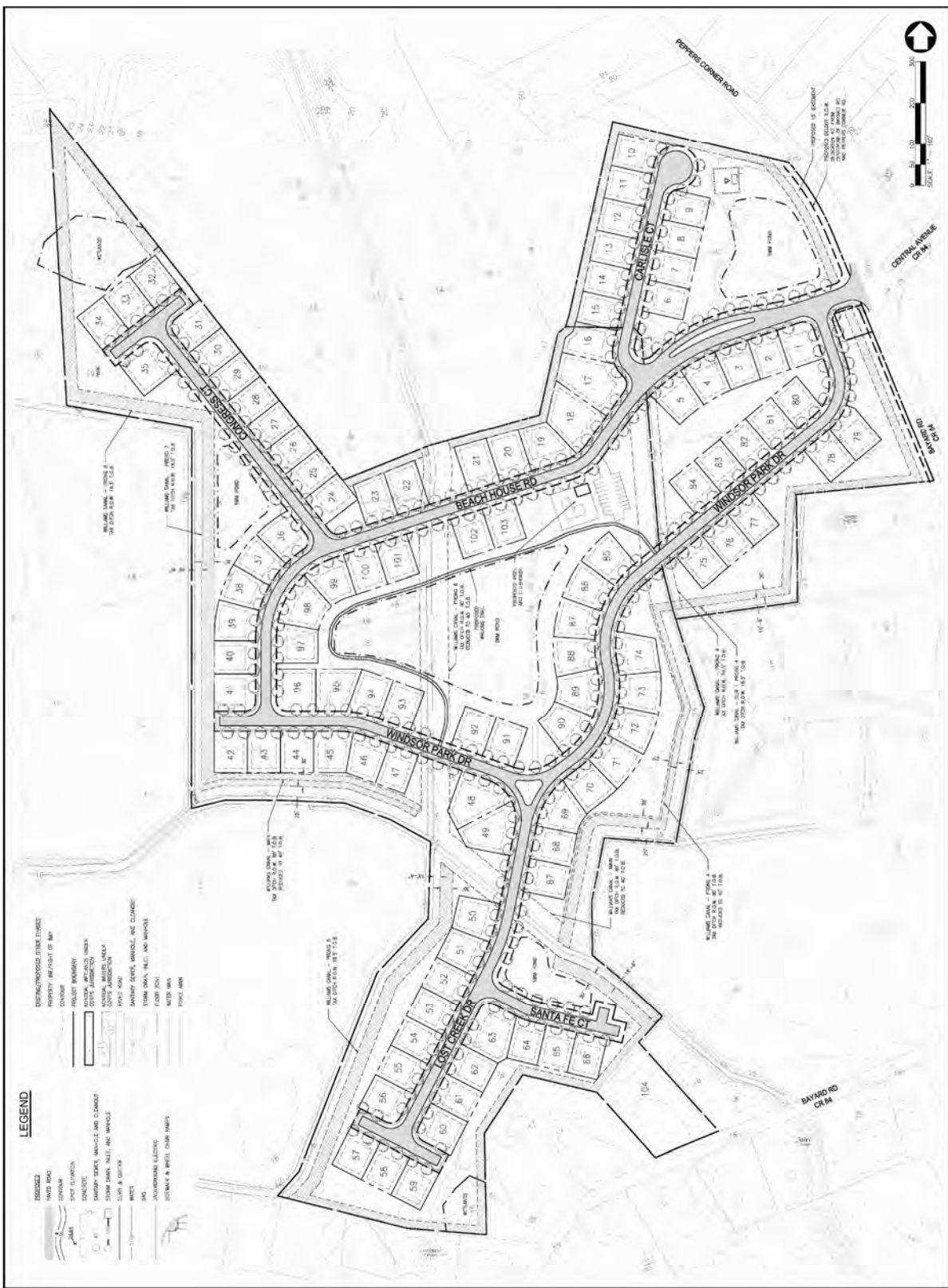
4,000 ft
 STUDY INTERSECTION

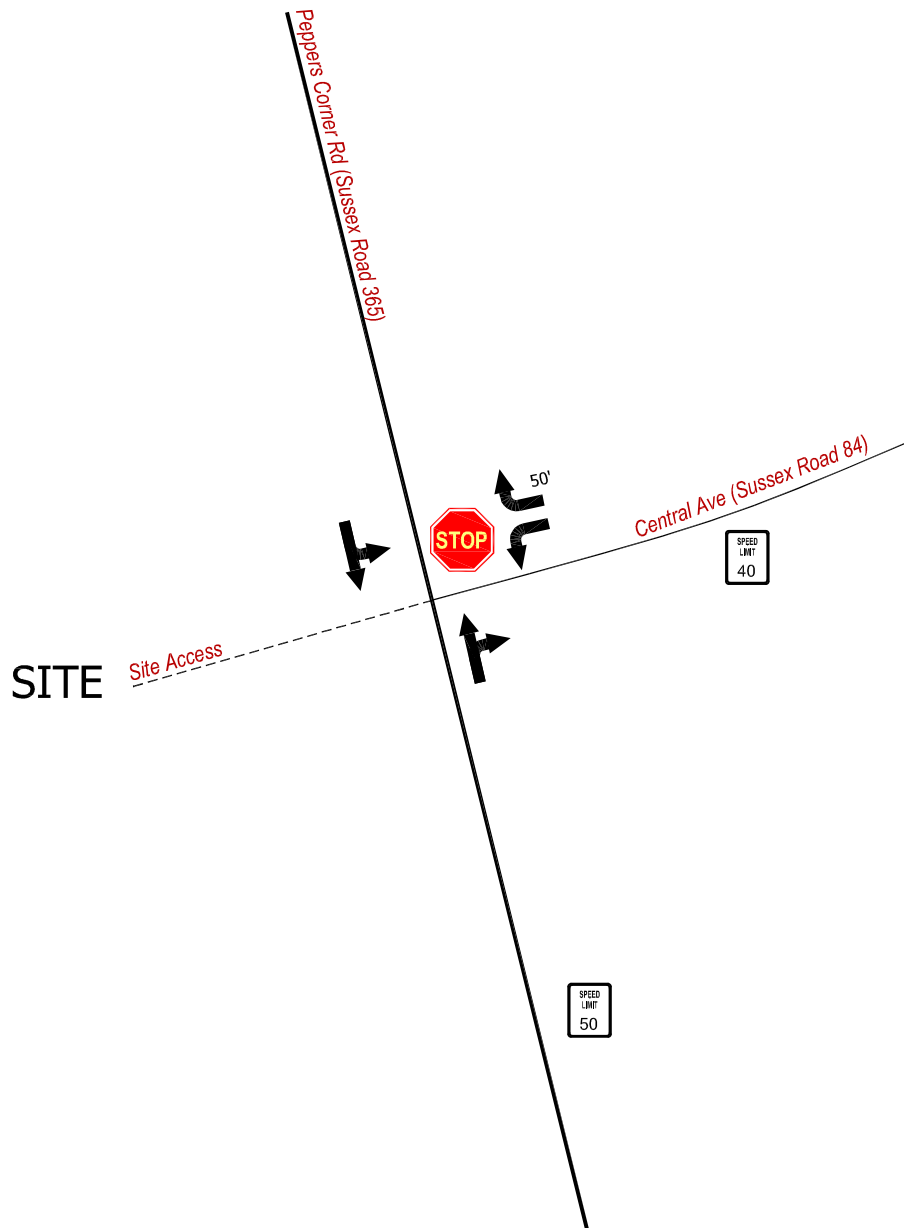
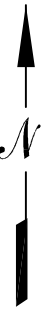
EXHIBIT 1
SITE LOCATION MAP



PRELIMINARY SITE PLAN PSP-3	GOOD WILL FARM SUSSEX COUNTY, DELAWARE	GMB GEORGE, MILLS & BOHR, LLC ARCHITECTS & ENGINEERS 208 WEST MAIN STREET SALISBURY, MARYLAND 21801 410-551-1111	LAND TECH LAND DEVELOPMENT, INC. 1000 E. COASTAL BLVD. WILMINGTON, DELAWARE 19801 302-426-0200	NO.	REVISIONS	DATE



EXHIBIT 1A
 SITE SKETCH PLAN



NOT TO SCALE

EXHIBIT 2 EXISTING LANE USE AND TRAFFIC CONTROL

EXISTING TRAFFIC CONDITIONS

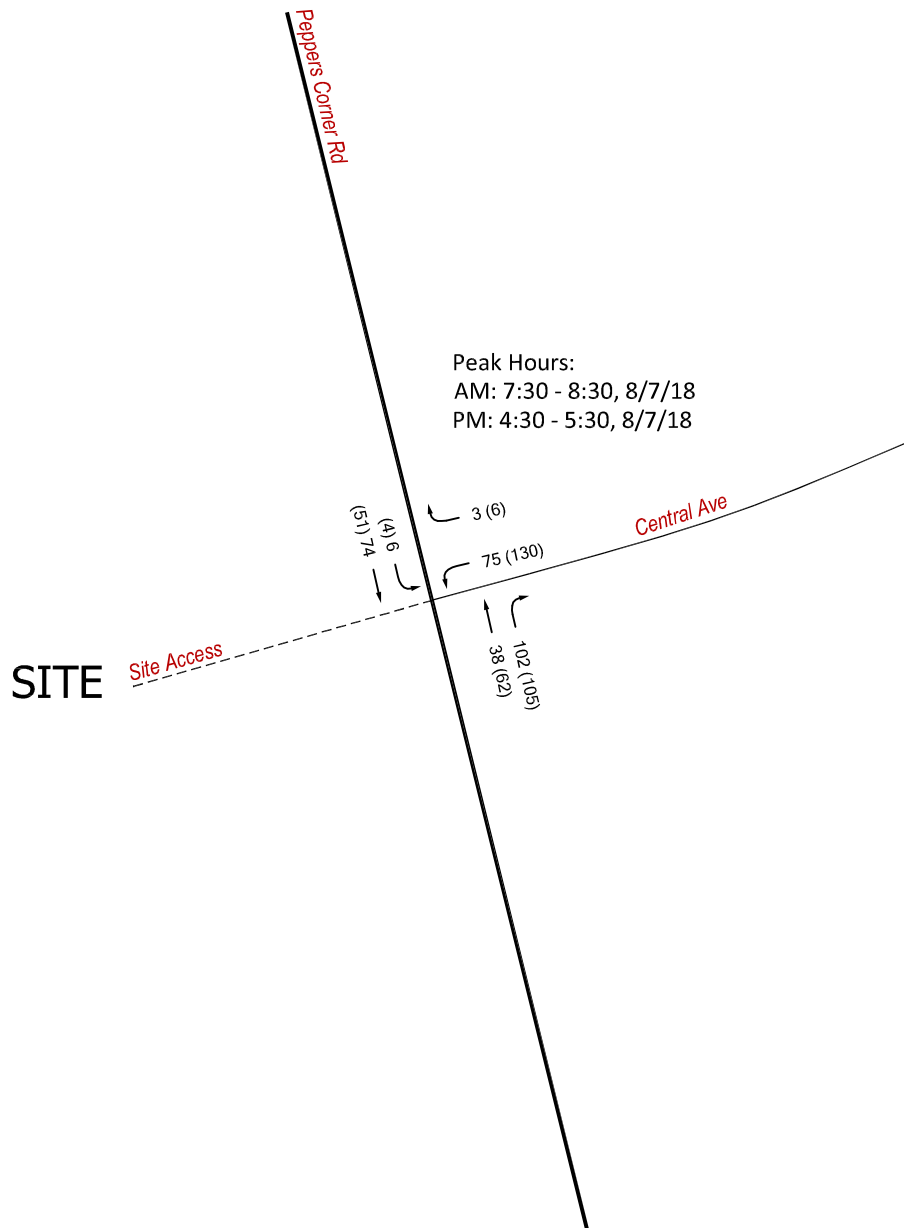
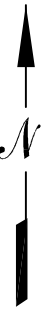
Vehicle turning movement and bicycle and pedestrian counts were collected at the study intersection on a weekday in August 2018. These counts, including a separate count of heavy vehicles are contained in Exhibits 3 and 3A, respectively. There were no observations of pedestrians. Seven-day machine counts were collected on Peppers Corner north of Central Avenue. Turning movement counts and machine counts are contained in Appendix A.

The morning and evening peak hour turning movement counts collected in August 2018 were adjusted using the Seasonal Adjustment Factors provided in the Minutes of the Scoping Meeting dated August 29, 2018 as shown in the table below. These factors were applied to the Existing Peak Hour Traffic Volumes to obtain the Seasonally Adjusted Peak Hour Traffic Volumes as shown in Exhibit 4.

Seasonal Adjustment Factors for the roads in the study area are as follows:

Roads	July	August	September
Central Avenue (Sussex Road 84)	0.94	0.92	0.96
Peppers Corner Road (Sussex Road 365)	0.94	0.92	0.96
All Other Roads	1.00	1.00	1.00

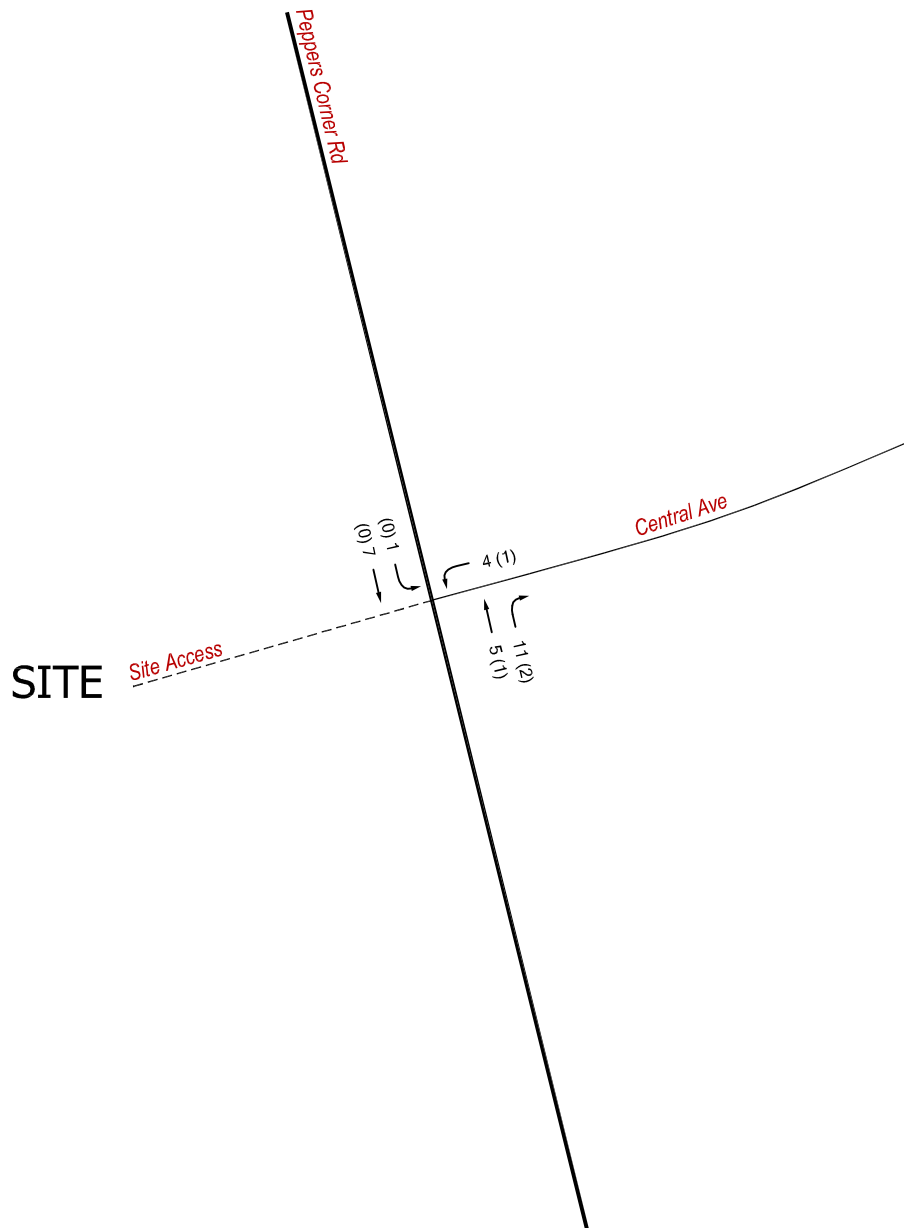
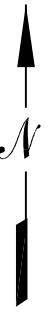
These turning movement counts, machine counts, committed development trip distributions and assignments, and project site trip distributions and assignments were submitted to DeIDOT for approval on August 31, 2018. In their review letter, dated September 12, 2018, DeIDOT approved the submittal. Correspondence is contained in Appendix E.



NOT TO SCALE

00 - MORNING PEAK HOUR
(00) - EVENING PEAK HOUR

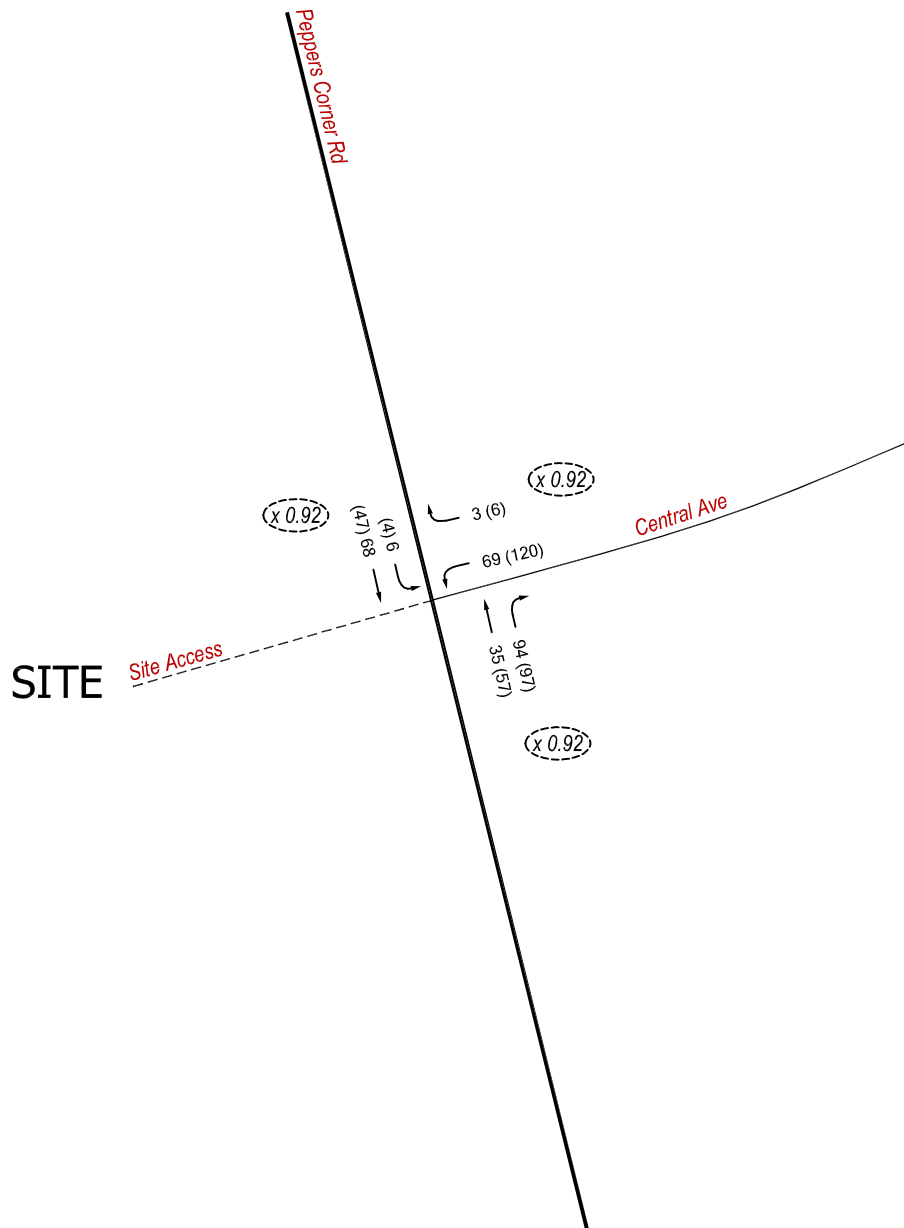
EXHIBIT 3 EXISTING PEAK HOUR TRAFFIC VOLUMES



NOT TO SCALE

00 - MORNING PEAK HOUR
(00) - EVENING PEAK HOUR

EXHIBIT 3A
EXISTING PEAK HOUR
TRAFFIC VOLUMES
(HEAVY VEHICLES)



(x 0.00) : Seasonal Adjustment Factors Applied



NOT TO SCALE

00 - MORNING PEAK HOUR
(00) - EVENING PEAK HOUR

EXHIBIT 4 SEASONALLY ADJUSTED EXISTING PEAK HOUR TRAFFIC VOLUMES

CRASH DATA

Crash data for a three-year period from August 27, 2015 through August 27, 2018 were obtained from DelDOT for the study area. The crash statistics are summarized below. The Crash Reports are contained in Appendix B.

Two crashes occurred during the three-year period. One was an angle collision and one did not involve a crash between two vehicles. Both crashes occurred during the mid-afternoon in daylight, but rainy conditions. There were no personal injuries nor fatalities.

BACKGROUND TRAFFIC CONDITIONS

The Traffic Count Review Letter, dated September 12, 2018, provided growth factors to be applied to the study intersection. These growth factors, shown in the table below, were applied to the Seasonally Adjusted Peak Hour Traffic Volumes to obtain the Base Peak Hour Traffic Volumes as shown in Exhibit 5. The correspondence is contained in Appendix E.

<u>Road</u>	<u>Growth Factor</u>	<u>Total Growth from 2018 to 2022</u>
Central Avenue (Sussex Road 84)	1.01	1.041
Peppers Corner Road (Sussex Road 365)	1.01	1.041
All Other Roads	1.00	1.00

The Minutes of the Scoping Meeting identified five committed developments to be included in the analysis of Background Peak Hour Traffic Conditions as follows.

1. Millers Creek
2. Lakelynns
3. Millville by the Sea
4. Silverwoods
5. Estuary

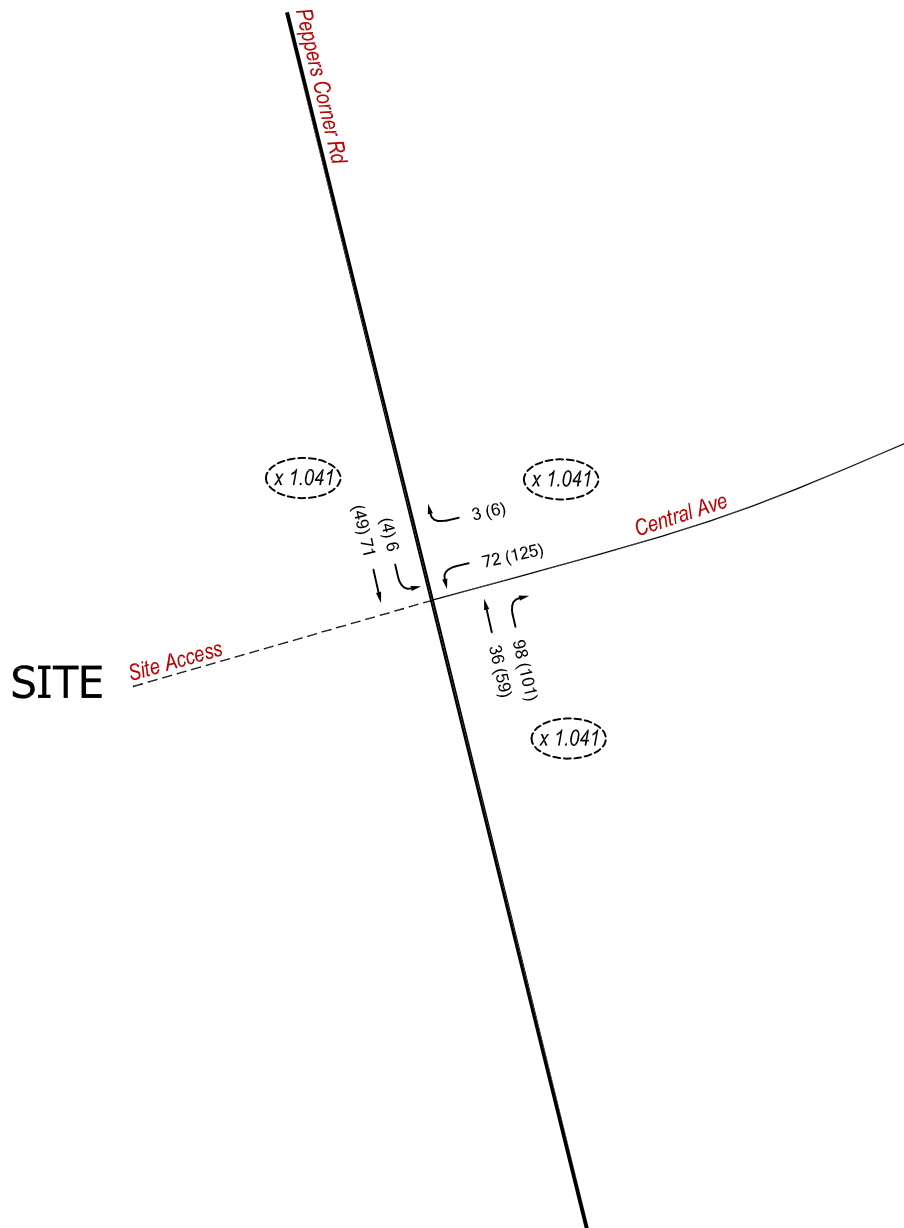
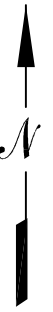
These committed developments are located on Exhibit 6.

Unit counts for these five committed developments were obtained from Sussex County's website and various site plans for each development. The proposed trip distributions were primarily obtained from previous Traffic Impact Studies as provided in Appendix C.

Utilizing information from the Institute of Transportation Engineer's (ITE) Trip Generation Manual, 10th Edition, trip generation rates and totals were developed for these committed developments as shown in Exhibit 7. Exhibit 8 provides the combined peak hour trips for the committed developments.

Please note that the trip generation rates and totals, trip distributions and trip assignments for the committed developments were submitted to DelDOT along with the traffic counts on August 31, 2018 and were approved in correspondence from DelDOT dated September 12, 2018. Correspondence is contained in Appendix E.

The peak hour trips for the committed developments were added to the Base Peak Hour Traffic Volumes to obtain the Background Peak Hour Traffic Volumes provided in Exhibit 9.



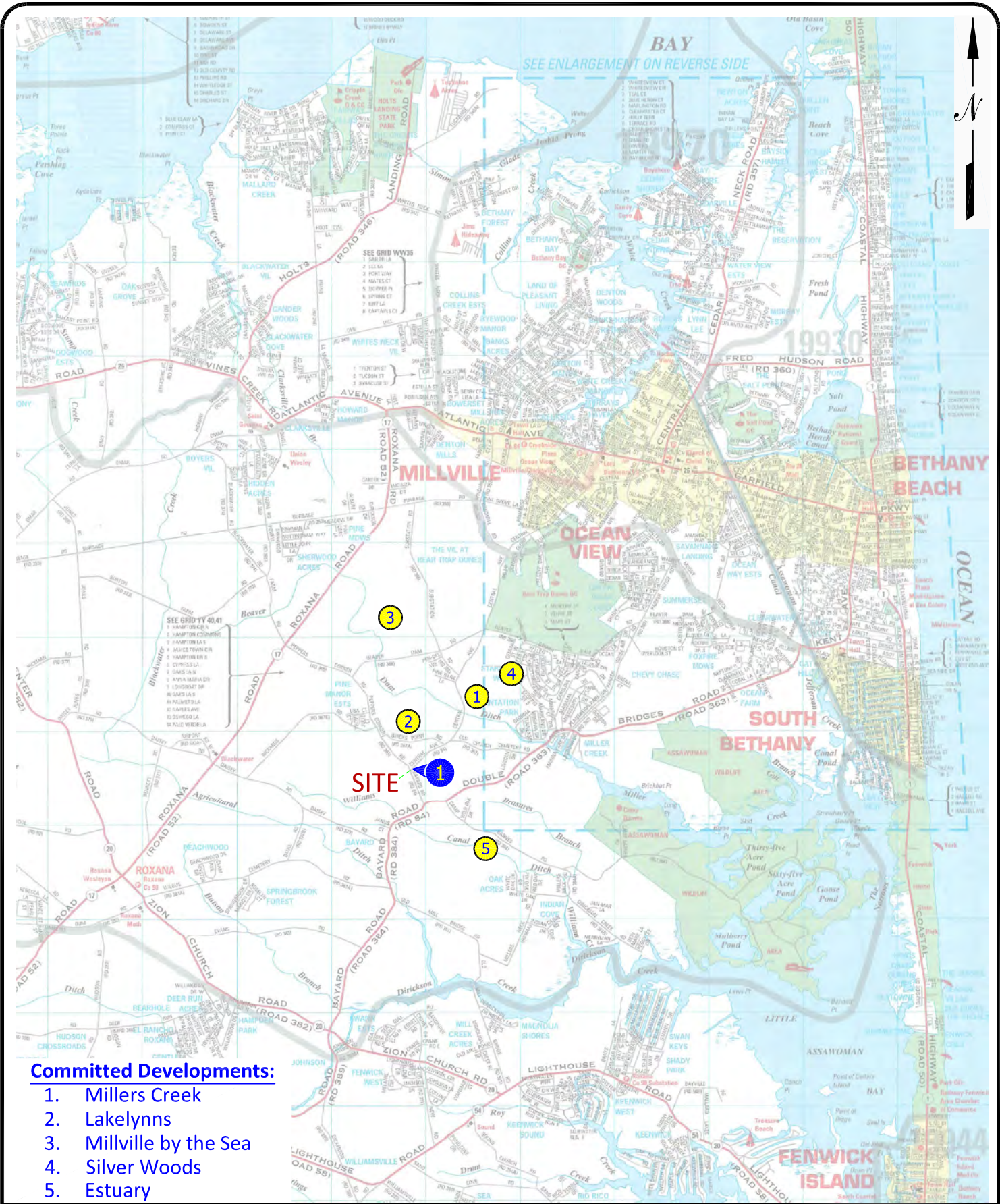
(x 0.00) : Growth Factors Applied



NOT TO SCALE

00 - MORNING PEAK HOUR
(00) - EVENING PEAK HOUR

EXHIBIT 5 BASE PEAK HOUR TRAFFIC VOLUMES



Committed Developments:

- 1. Millers Creek
- 2. Lakelynn
- 3. Millville by the Sea
- 4. Silver Woods
- 5. Estuary



4,000 ft

COMMITTED DEVELOPMENTS

**EXHIBIT 6
LOCATION MAP FOR
COMMITTED DEVELOPMENTS**

TRIP GENERATION RATES

<u>LAND USE</u>	<u>FORMULA</u>	<u>IN/OUT</u>
-----------------	----------------	---------------

Multifamily Housing, Low-Rise (ITE-220, Units)

Ln(Morning Trips) = 0.95 x Ln(Units) - 0.51	23/77
---	-------

Ln(Evening Trips) = 0.89 x Ln(Units) - 0.02	63/37
---	-------

Single-Family Detached (ITE-210, Units)

Morning Trips = 0.71 x (Units) + 4.80	25/75
---------------------------------------	-------

Ln(Evening Trips) = 0.96 x Ln(Units) + 0.20	63/37
---	-------

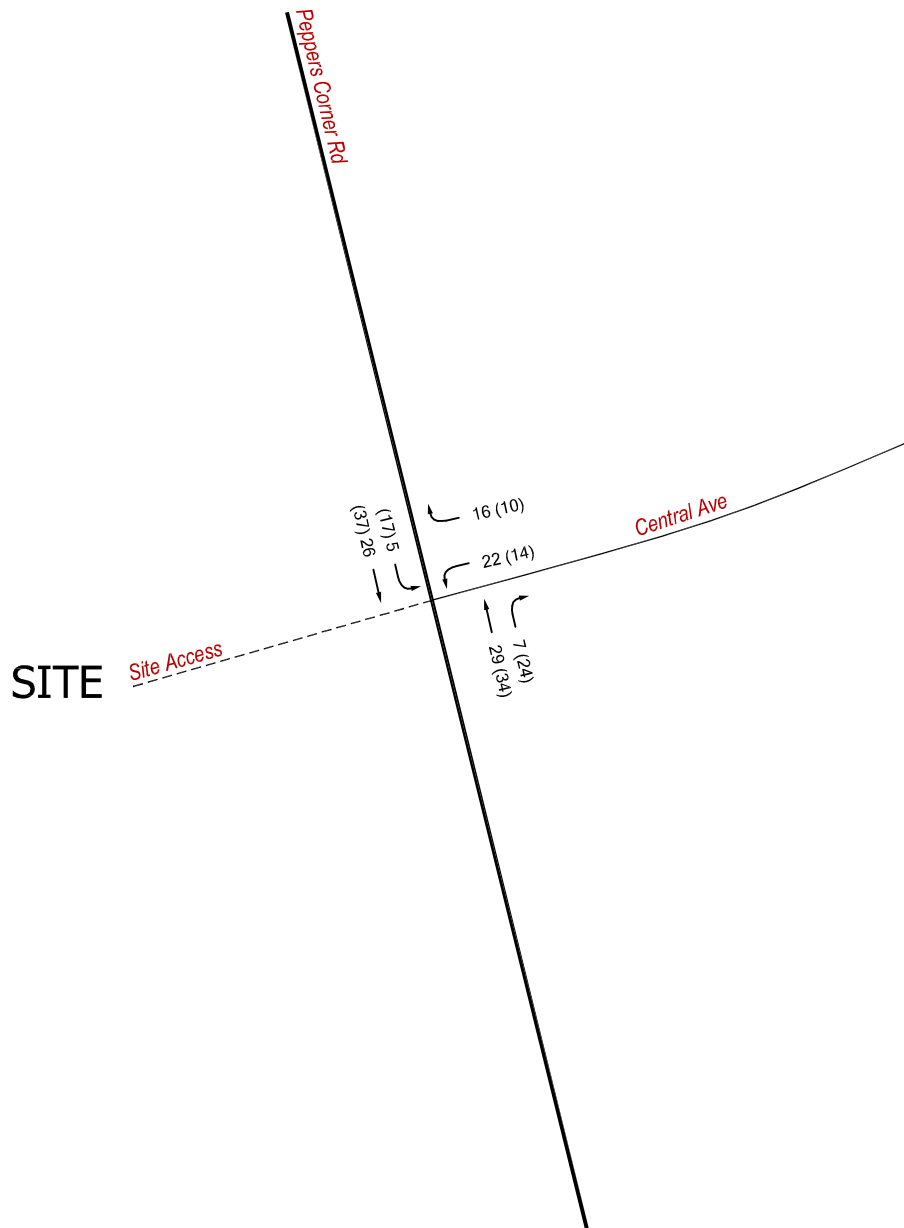
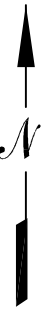
TRIP GENERATION TOTALS

	MORNING PEAK HOUR			EVENING PEAK HOUR		
	IN	OUT	TOTAL	IN	OUT	TOTAL
1. Millers Creek						
135 Multifamily Housing Units	14	49	63	49	28	77
2. Lakelynns (Conservative Estimate)						
45 Single-Family Detached Units	9	28	37	30	17	47
142 Multifamily Housing Units	<u>15</u>	<u>52</u>	<u>67</u>	<u>51</u>	<u>30</u>	<u>81</u>
Total Trips	24	80	104	81	47	128
3. Millville by the Sea (Unbuilt)						
101 Single-Family Detached Units	19	58	77	65	38	103
4. Silver Woods (Unbuilt)						
104 Single-Family Detached Units	20	59	79	66	39	105
5. Estuary (Recorded Lots)						
284 Single-Family Detached Units	51	155	206	175	102	277



Trip generation rates derived from ITE Trip Generation, 10th Edition, 2017.

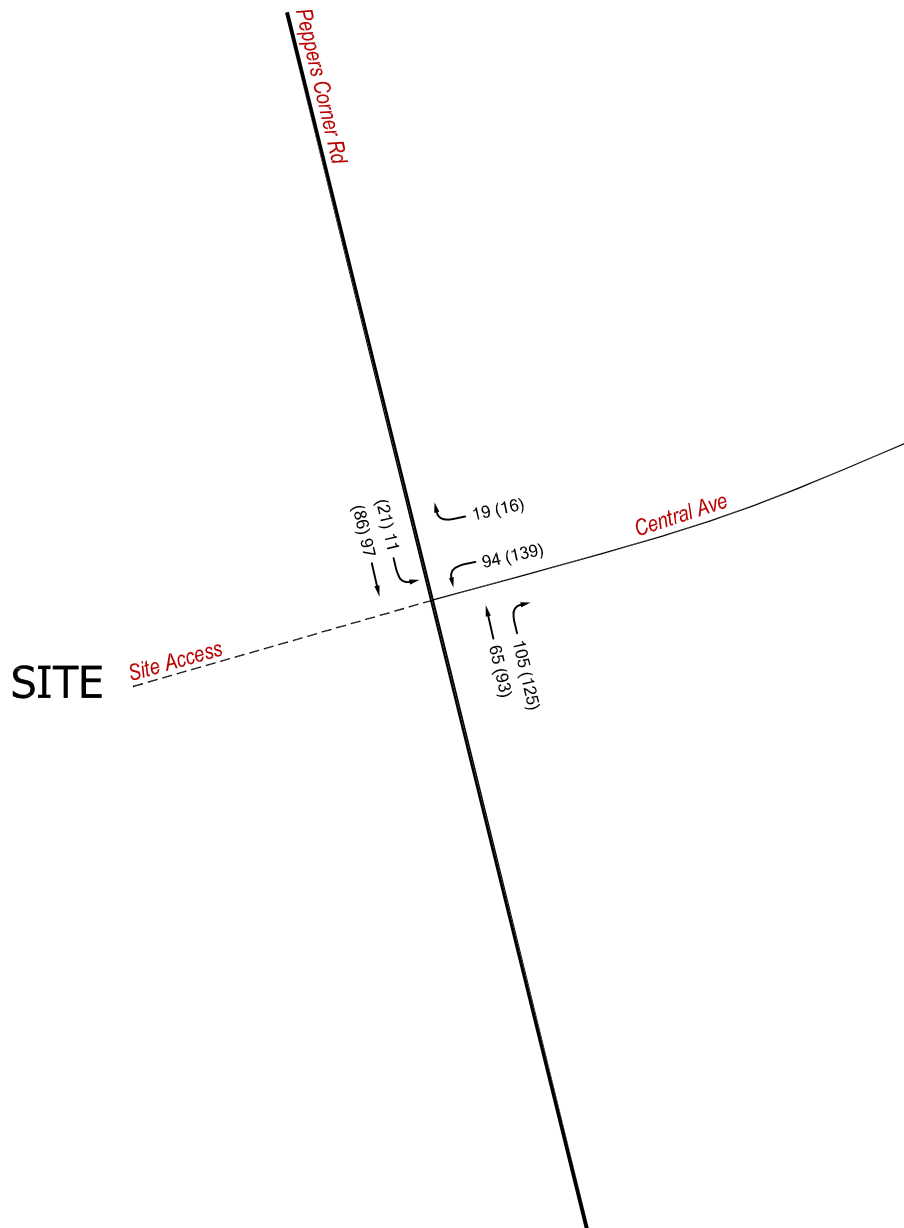
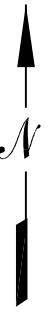
EXHIBIT 7 TRIP GENERATION RATES AND TOTALS FOR COMMITTED DEVELOPMENTS



NOT TO SCALE

00 - MORNING PEAK HOUR
(00) - EVENING PEAK HOUR

EXHIBIT 8 COMBINED TRIPS GENERATED BY COMMITTED DEVELOPMENTS



NOT TO SCALE

00 - MORNING PEAK HOUR
(00) - EVENING PEAK HOUR

EXHIBIT 9 BACKGROUND PEAK HOUR TRAFFIC VOLUMES

TOTAL TRAFFIC CONDITIONS

Gulfstream Development, LLC seeks to develop 104 single family detached houses on an approximately 56.61-acre assemblage of parcels (Tax Parcels 134-18.00-55.00, 134-19.00-5.00 and 6.00). The property is zoned AR-1 (Agricultural Residential) and no change in zone is desired.

The land is located on the west side of Peppers Corner Road (Sussex Road 365) opposite Central Avenue (Sussex Road 84) in Sussex County, Delaware. Of the 104 single family homes, 103 will be provided one full access is proposed along Peppers Corner Road, opposite of Central Avenue, creating a four-leg STOP controlled intersection. The 104th home will have access directly onto Bayard Road. Construction is anticipated to be completed in 2022.

Utilizing information from the Institute of Transportation Engineer's (ITE) Trip Generation Manual, 10th Edition, 2017, trip generation rates and totals were developed for the proposed development as shown in Exhibit 10.

These trips were distributed and assigned to the study intersections in accordance with information from the Minutes of the Scoping Meeting dated August 29, 2018. The trip distributions and assignments are provided in Exhibits 11A and 11B, respectively. These peak hour traffic volumes were added to the Background Peak Hour Traffic Volumes to obtain the Total Peak Hour Traffic Volumes as shown in Exhibit 12.

TRIP GENERATION RATES

<u>LAND USE</u>	<u>FORMULA</u>	<u>IN/OUT</u>
<i>Single-Family Detached (ITE-210, Units)</i>		
	Morning Trips = 0.71 x (Units) + 4.80	25/75
	Ln(Evening Trips) = 0.96 x Ln(Units) + 0.20	63/37

TRIP GENERATION TOTALS

MORNING PEAK HOUR			EVENING PEAK HOUR		
IN	OUT	TOTAL	IN	OUT	TOTAL

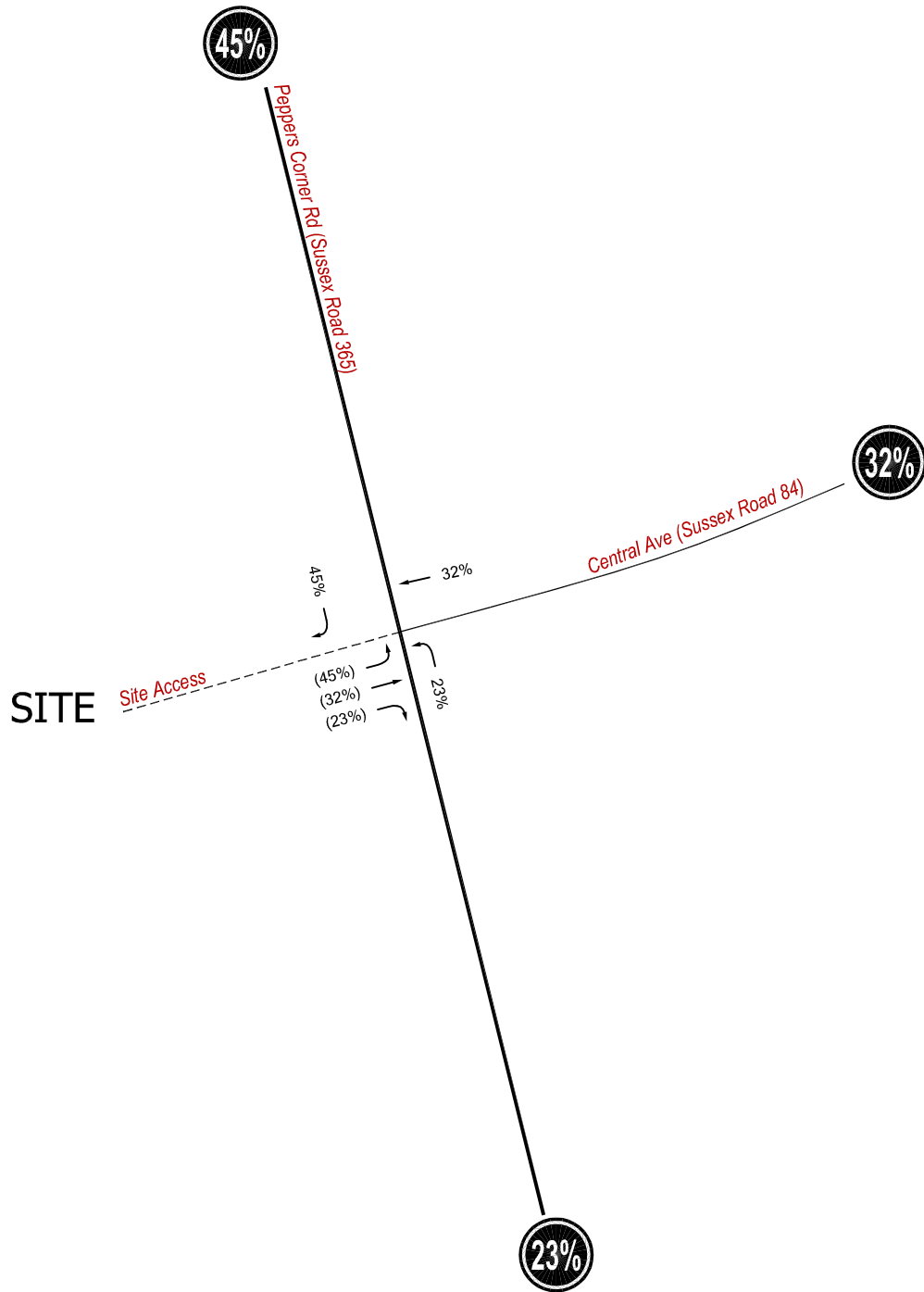
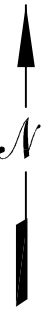
Good Will Farm

103	Single-Family Detached Units	19	59	78	66	39	105
-----	------------------------------	----	----	----	----	----	-----

Trip generation rates derived from ITE Trip Generation, 10th Edition, 2017.



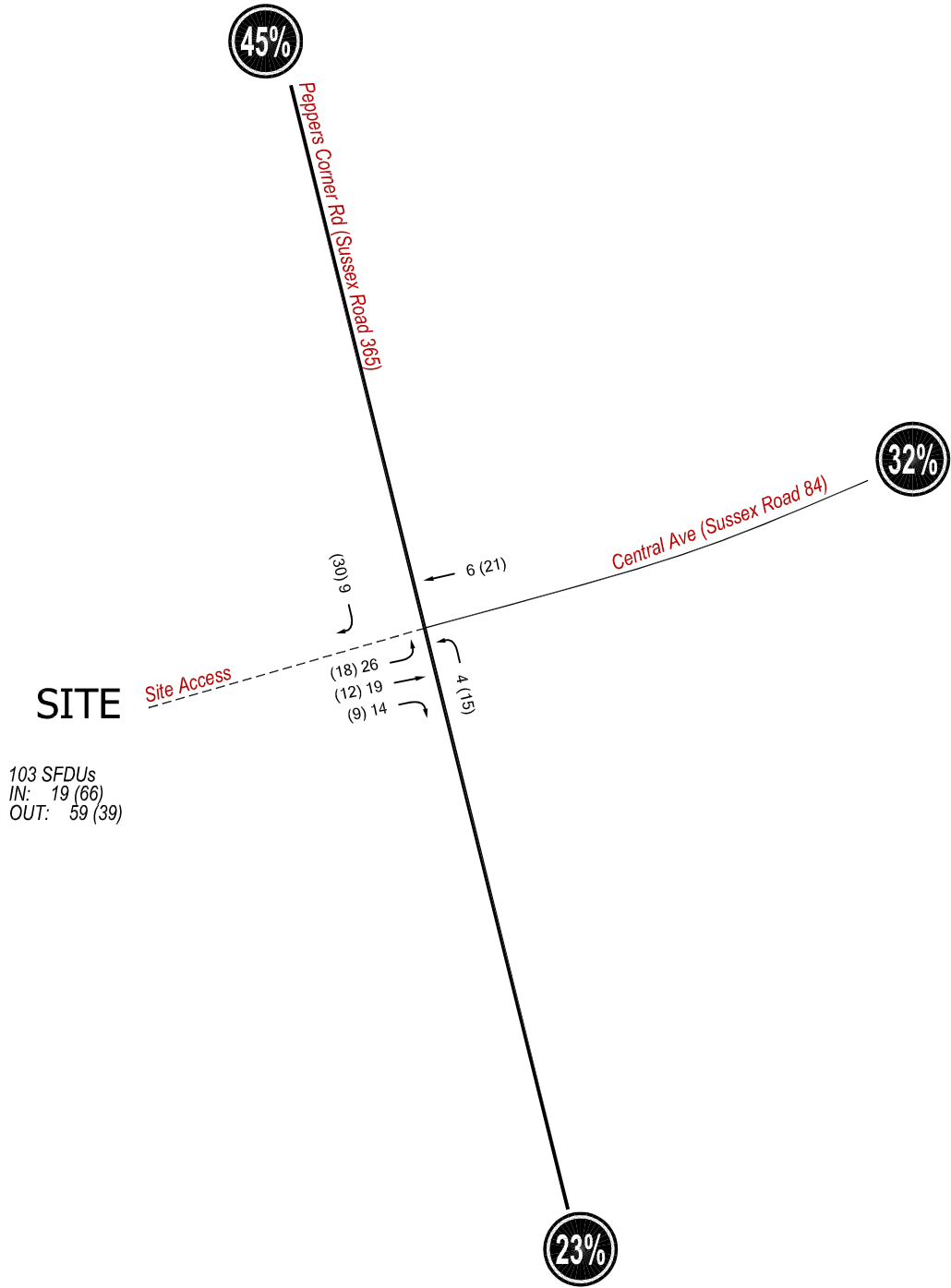
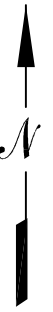
EXHIBIT 10
 TRIP GENERATION RATES AND TOTALS
 FOR SUBJECT SITE



NOT TO SCALE

0% : PERCENT OF INBOUND TRIPS
(0%) : PERCENT OF OUTBOUND TRIPS

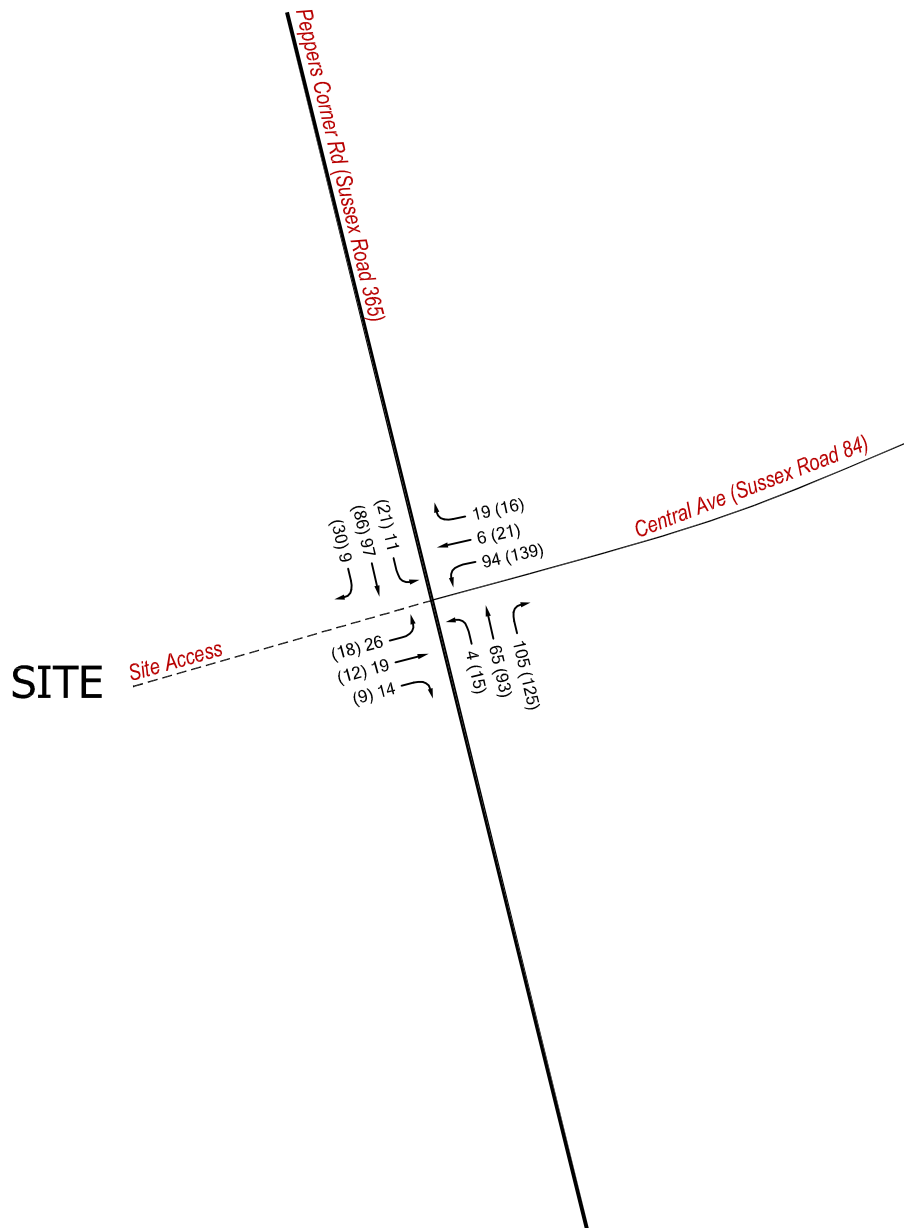
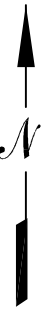
EXHIBIT 11A TRIP DISTRIBUTION FOR SUBJECT SITE



NOT TO SCALE

00 - MORNING PEAK HOUR
(00) - EVENING PEAK HOUR

EXHIBIT 11B TRIP ASSIGNMENT FOR SUBJECT SITE



NOT TO SCALE

00 - MORNING PEAK HOUR
(00) - EVENING PEAK HOUR

EXHIBIT 12 TOTAL PEAK HOUR TRAFFIC VOLUMES

DELDOT PROJECTS

There are no DeIDOT projects currently in the study area.

INTERSECTION CAPACITY ANALYSES

The study intersection was evaluated utilizing the intersection capacity analyses methodology identified in the Highway Capacity Manual, which is incorporated by the Highway Capacity Software, Version 7.6. The results are discussed below and are provided in Exhibit 13. The capacity analysis worksheets are contained in Appendix D.

Peppers Corner Road (Sussex Road 365) and Central Avenue (Sussex Road 84)

The site access will add a fourth leg on the west to the existing 3-leg intersection of Peppers Corner Road and Central Avenue.

This site access was analyzed with the following lane use:

Northbound: Left Turn Lane, Shared Through/Right Turn Lane

Southbound: Shared Left Turn/Through Lane, Right Turn Lane

Eastbound: Shared Left Turn/Through/Right Turn Lane

Westbound: Shared Left Turn/Through Lane/Right Turn Lane

All approaches to the study intersection are projected to operate at acceptable Levels of Service (LOS B or better) for future peak hour traffic conditions.

The future recommended lane use is depicted in Exhibit 14.

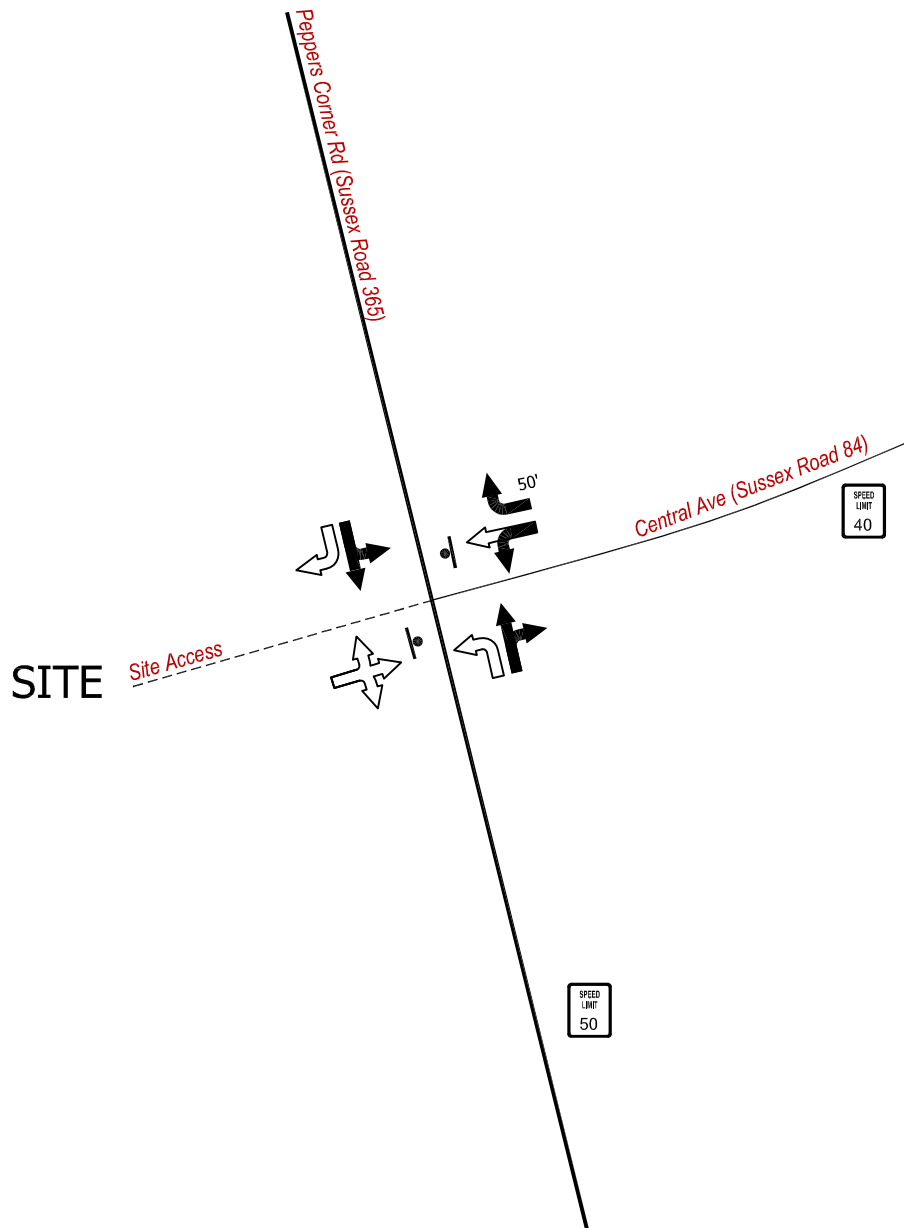
HCM Methodology

Intersection	Type of Control	Movement	2018 Existing Traffic		2022 Background Traffic		2022 Total Traffic	
			AM	PM	AM	PM	AM	PM
			LOS / Delay (sec)					
1. Peppers Corner Rd & Central Ave / Site Access	Two Way Stop	WB LT	B / 10.2	B / 10.4	B / 11.0	B / 11.8	B / 12.2	B / 14.1
		WB R	A / 8.8	A / 8.9	A / 9.0	A / 9.2	A / 9.0	A / 9.2
		EB LTR					B / 11.0	B / 11.4
		NB L					A / 7.5	A / 7.5
		SB L	A / 7.7	A / 7.6	A / 7.8	A / 7.7	A / 7.8	A / 7.7

Peppers Corner Rd runs north/south direction.



**EXHIBIT 13
RESULTS OF INTERSECTION
CAPACITY ANALYSES**



NOT TO SCALE

◼ : STOP SIGN

→ EXISTING LANE USE
⇨ RECOMMENDED LANE USE

EXHIBIT 14 FUTURE LANE USE

TRANSIT, PEDESTRIAN, AND BICYCLE FACILITIES

A representative from Delaware Transit Corporation (DTC) was contacted to determine what transit facilities exist in the area. DART does not serve this area and no future service is planned at this time. Please see correspondence in Appendix E.

A representative from DelDOT's Local Systems Planning Section was contacted to determine requested accommodations for bicycle and pedestrians. A bike lane is requested through any right turn lane at the site access and, should a left turn lane be required, along the through lane adjacent to the site frontage. A multi-use path is also requested along the site frontages.

Correspondence is contained in Appendix E.

RECOMMENDATIONS AND CONCLUSIONS

Gulfstream Development, LLC seeks to develop 104 single family detached houses on an approximately 56.61-acre assemblage of parcels (Tax Parcels 134-18.00-55.00, 134-19.00-5.00 and 6.00). The property is zoned AR-1 (Agricultural Residential) and no change in zone is desired.

The land is located on the west side of Peppers Corner Road (Sussex Road 365) opposite Central Avenue (Sussex Road 84) in Sussex County, Delaware. Of the 104 single family homes, 103 will be provided one full access is proposed along Peppers Corner Road, opposite of Central Avenue, creating a four-leg STOP controlled intersection. The 104th home will have access directly onto Bayard Road. Construction is anticipated to be completed in 2022.

Based on the minutes of the Scoping Meeting, dated August 29, 2018, the following intersection was included in the Traffic Impact Study.

- Peppers Corner Road (Sussex Road 365) and Site Access/Central Avenue

The Minutes of the Scoping Meeting identified the following committed developments in the study area to be included in the Traffic Impact Study.

6. Millers Creek
7. Lakelynns
8. Millville by the Sea
9. Silverwoods
10. Estuary

Currently, there are no DelDOT projects within the study area.

The study intersection was evaluated utilizing the intersection capacity analyses methodology identified in the Highway Capacity Manual, which is incorporated by the Highway Capacity Software, Version 7.6. All approaches to the study intersection are projected to operate at acceptable Levels of Service (LOS B or better) for future peak hour traffic conditions.

APPENDIX A

Intersection Turning Movement Counts and Condition Diagram



TOTALS TURNING MOVEMENT COUNT - SUMMARY

Intersection of: Peppers Corner Road
and: Central Avenue
Location: Sussex County, Delaware

Counted by: VCU
Date: August 07, 2018
Weather: Sunny/Warm
Entered by: SN

Tuesday
Star Rating: 5



TIME	TRAFFIC FROM NORTH on: Peppers Corner Road					TRAFFIC FROM SOUTH on: Peppers Corner Road					TRAFFIC FROM EAST on: Central Avenue					TRAFFIC FROM WEST on:					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
AM																					
7:00 - 7:15	0	13	0	0	13	12	9	0	0	21	0	0	16	0	16	0	0	0	0	0	50
7:15 - 7:30	0	18	1	0	19	12	4	0	0	16	1	0	16	0	17	0	0	0	0	0	52
7:30 - 7:45	0	18	2	0	20	29	7	0	0	36	0	0	17	0	17	0	0	0	0	0	73
7:45 - 8:00	0	21	0	0	21	20	14	0	0	34	0	0	22	0	22	0	0	0	0	0	77
8:00 - 8:15	0	18	0	0	18	19	8	0	0	27	1	0	18	0	19	0	0	0	0	0	64
8:15 - 8:30	0	17	4	0	21	34	9	0	0	43	2	0	18	0	20	0	0	0	0	0	84
8:30 - 8:45	0	26	0	0	26	15	12	0	0	27	1	0	18	0	19	0	0	0	0	0	72
8:45 - 9:00	0	7	0	0	7	30	6	0	0	36	2	0	18	0	20	0	0	0	0	0	63
2 Hr Totals	0	138	7	0	145	171	69	0	0	240	7	0	143	0	150	0	0	0	0	0	535
1 Hr Totals																					
7:00 - 8:00	0	70	3	0	73	73	34	0	0	107	1	0	71	0	72	0	0	0	0	0	252
7:15 - 8:15	0	75	3	0	78	80	33	0	0	113	2	0	73	0	75	0	0	0	0	0	266
7:30 - 8:30	0	74	6	0	80	102	38	0	0	140	3	0	75	0	78	0	0	0	0	0	298
7:45 - 8:45	0	82	4	0	86	88	43	0	0	131	4	0	76	0	80	0	0	0	0	0	297
8:00 - 9:00	0	68	4	0	72	98	35	0	0	133	6	0	72	0	78	0	0	0	0	0	283
PEAK HOUR	0	74	6	0	80	102	38	0	0	140	3	0	75	0	78	0	0	0	0	0	298
PM																					
4:00 - 4:15	0	8	2	0	10	31	12	0	0	43	0	0	26	0	26	0	0	0	0	0	79
4:15 - 4:30	0	11	0	0	11	21	12	0	0	33	0	0	22	0	22	0	0	0	0	0	66
4:30 - 4:45	0	10	0	0	10	31	11	0	0	42	3	0	30	0	33	0	0	0	0	0	85
4:45 - 5:00	0	10	1	1	12	21	22	0	0	43	3	0	33	0	36	0	0	0	0	0	91
5:00 - 5:15	0	15	0	0	15	35	11	0	0	46	0	0	34	0	34	0	0	0	0	0	95
5:15 - 5:30	0	16	2	0	18	18	18	0	0	36	0	0	33	0	33	0	0	0	0	0	87
5:30 - 5:45	0	15	0	0	15	21	9	0	0	30	0	0	25	0	25	0	0	0	0	0	70
5:45 - 6:00	0	6	1	0	7	14	12	0	0	26	0	0	32	0	32	0	0	0	0	0	65
2 Hr Totals	0	91	6	1	98	192	107	0	0	299	6	0	235	0	241	0	0	0	0	0	638
1 Hr Totals																					
4:00 - 5:00	0	39	3	1	43	104	57	0	0	161	6	0	111	0	117	0	0	0	0	0	321
4:15 - 5:15	0	46	1	1	48	108	56	0	0	164	6	0	119	0	125	0	0	0	0	0	337
4:30 - 5:30	0	51	3	1	55	105	62	0	0	167	6	0	130	0	136	0	0	0	0	0	358
4:45 - 5:45	0	56	3	1	60	95	60	0	0	155	3	0	125	0	128	0	0	0	0	0	343
5:00 - 6:00	0	52	3	0	55	88	50	0	0	138	0	0	124	0	124	0	0	0	0	0	317
PEAK HOUR	0	51	3	1	55	105	62	0	0	167	6	0	130	0	136	0	0	0	0	0	358

CARS TURNING MOVEMENT COUNT - SUMMARY

Intersection of: Peppers Corner Road
and: Central Avenue
Location: Sussex County, Delaware

Counted by: VCU
Date: August 07, 2018
Weather: Sunny/Warm
Entered by: SN

Tuesday
Star Rating: 5



TIME	TRAFFIC FROM NORTH on: Peppers Corner Road					TRAFFIC FROM SOUTH on: Peppers Corner Road					TRAFFIC FROM EAST on: Central Avenue					TRAFFIC FROM WEST on:					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
AM																					
7:00 - 7:15		12	0	0	12	12	9		0	21	0		16	0	16					0	49
7:15 - 7:30		18	1	0	19	11	4		0	15	1		16	0	17					0	51
7:30 - 7:45		17	2	0	19	23	6		0	29	0		15	0	15					0	63
7:45 - 8:00		16	0	0	16	18	12		0	30	0		21	0	21					0	67
8:00 - 8:15		18	0	0	18	17	7		0	24	1		18	0	19					0	61
8:15 - 8:30		16	3	0	19	33	8		0	41	2		17	0	19					0	79
8:30 - 8:45		23	0	0	23	14	12		0	26	1		18	0	19					0	68
8:45 - 9:00		5	0	0	5	29	6		0	35	2		18	0	20					0	60
2 Hr Totals	0	125	6	0	131	157	64	0	0	221	7	0	139	0	146	0	0	0	0	0	498
1 Hr Totals																					
7:00 - 8:00	0	63	3	0	66	64	31	0	0	95	1	0	68	0	69	0	0	0	0	0	230
7:15 - 8:15	0	69	3	0	72	69	29	0	0	98	2	0	70	0	72	0	0	0	0	0	242
7:30 - 8:30	0	67	5	0	72	91	33	0	0	124	3	0	71	0	74	0	0	0	0	0	270
7:45 - 8:45	0	73	3	0	76	82	39	0	0	121	4	0	74	0	78	0	0	0	0	0	275
8:00 - 9:00	0	62	3	0	65	93	33	0	0	126	6	0	71	0	77	0	0	0	0	0	268
PEAK HOUR																					
7:30 - 8:30	0	67	5	0	72	91	33	0	0	124	3	0	71	0	74	0	0	0	0	0	270
PM																					
4:00 - 4:15		8	2	0	10	30	12		0	42	0		24	0	24					0	76
4:15 - 4:30		11	0	0	11	21	12		0	33	0		21	0	21					0	65
4:30 - 4:45		10	0	0	10	30	11		0	41	3		30	0	33					0	84
4:45 - 5:00		10	1	1	12	21	21		0	42	3		33	0	36					0	90
5:00 - 5:15		15	0	0	15	35	11		0	46	0		33	0	33					0	94
5:15 - 5:30		16	2	0	18	17	18		0	35	0		33	0	33					0	86
5:30 - 5:45		15	0	0	15	21	9		0	30	0		25	0	25					0	70
5:45 - 6:00		6	1	0	7	14	12		0	26	0		32	0	32					0	65
2 Hr Totals	0	91	6	1	98	189	106	0	0	295	6	0	231	0	237	0	0	0	0	0	630
1 Hr Totals																					
4:00 - 5:00	0	39	3	1	43	102	56	0	0	158	6	0	108	0	114	0	0	0	0	0	315
4:15 - 5:15	0	46	1	1	48	107	55	0	0	162	6	0	117	0	123	0	0	0	0	0	333
4:30 - 5:30	0	51	3	1	55	103	61	0	0	164	6	0	129	0	135	0	0	0	0	0	354
4:45 - 5:45	0	56	3	1	60	94	59	0	0	153	3	0	124	0	127	0	0	0	0	0	340
5:00 - 6:00	0	52	3	0	55	87	50	0	0	137	0	0	123	0	123	0	0	0	0	0	315
PEAK HOUR																					
4:30 - 5:30	0	51	3	1	55	103	61	0	0	164	6	0	129	0	135	0	0	0	0	0	354

HEAVY TRUCKS TURNING MOVEMENT COUNT - SUMMARY

Intersection of: Peppers Corner Road
and: Central Avenue
Location: Sussex County, Delaware

Counted by: VCU
Date: August 07, 2018
Weather: Sunny/Warm
Entered by: SN

Tuesday

Star Rating: 5



TIME	TRAFFIC FROM NORTH on: Peppers Corner Road					TRAFFIC FROM SOUTH on: Peppers Corner Road					TRAFFIC FROM EAST on: Central Avenue					TRAFFIC FROM WEST on:					TOTAL N + S + E + W
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	
AM																					
7:00 - 7:15		1	0	0	1	0	0		0	0	0		0	0	0					0	1
7:15 - 7:30		0	0	0	0	1	0		0	1	0		0	0	0					0	1
7:30 - 7:45		1	0	0	1	6	1		0	7	0		2	0	2					0	10
7:45 - 8:00		5	0	0	5	2	2		0	4	0		1	0	1					0	10
8:00 - 8:15		0	0	0	0	2	1		0	3	0		0	0	0					0	3
8:15 - 8:30		1	1	0	2	1	1		0	2	0		1	0	1					0	5
8:30 - 8:45		3	0	0	3	1	0		0	1	0		0	0	0					0	4
8:45 - 9:00		2	0	0	2	1	0		0	1	0		0	0	0					0	3
2 Hr Totals	0	13	1	0	14	14	5	0	0	19	0	0	4	0	4	0	0	0	0	0	37
1 Hr Totals																					
7:00 - 8:00	0	7	0	0	7	9	3	0	0	12	0	0	3	0	3	0	0	0	0	0	22
7:15 - 8:15	0	6	0	0	6	11	4	0	0	15	0	0	3	0	3	0	0	0	0	0	24
7:30 - 8:30	0	7	1	0	8	11	5	0	0	16	0	0	4	0	4	0	0	0	0	0	28
7:45 - 8:45	0	9	1	0	10	6	4	0	0	10	0	0	2	0	2	0	0	0	0	0	22
8:00 - 9:00	0	6	1	0	7	5	2	0	0	7	0	0	1	0	1	0	0	0	0	0	15
PEAK HOUR																					
7:30 - 8:30	0	7	1	0	8	11	5	0	0	16	0	0	4	0	4	0	0	0	0	0	28
PM																					
4:00 - 4:15		0	0	0	0	1	0		0	1	0		2	0	2					0	3
4:15 - 4:30		0	0	0	0	0	0		0	0	0		1	0	1					0	1
4:30 - 4:45		0	0	0	0	1	0		0	1	0		0	0	0					0	1
4:45 - 5:00		0	0	0	0	0	1		0	1	0		0	0	0					0	1
5:00 - 5:15		0	0	0	0	0	0		0	0	0		1	0	1					0	1
5:15 - 5:30		0	0	0	0	1	0		0	1	0		0	0	0					0	1
5:30 - 5:45		0	0	0	0	0	0		0	0	0		0	0	0					0	0
5:45 - 6:00		0	0	0	0	0	0		0	0	0		0	0	0					0	0
2 Hr Totals	0	0	0	0	0	3	1	0	0	4	0	0	4	0	4	0	0	0	0	0	8
1 Hr Totals																					
4:00 - 5:00	0	0	0	0	0	2	1	0	0	3	0	0	3	0	3	0	0	0	0	0	6
4:15 - 5:15	0	0	0	0	0	1	1	0	0	2	0	0	2	0	2	0	0	0	0	0	4
4:30 - 5:30	0	0	0	0	0	2	1	0	0	3	0	0	1	0	1	0	0	0	0	0	4
4:45 - 5:45	0	0	0	0	0	1	1	0	0	2	0	0	1	0	1	0	0	0	0	0	3
5:00 - 6:00	0	0	0	0	0	1	0	0	0	1	0	0	1	0	1	0	0	0	0	0	2
PEAK HOUR																					
4:30 - 5:30	0	0	0	0	0	2	1	0	0	3	0	0	1	0	1	0	0	0	0	0	4

PEDESTRIAN OBSERVATIONS - SUMMARY

Intersection of: Peppers Corner Road
and: Central Avenue
Location: Sussex County, Delaware

Counted by: VCU
Date: August 07, 2018
Weather: Sunny/Warm
Entered by: SN

Tuesday
Star Rating: 5



TIME	NORTH LEG	SOUTH LEG	EAST LEG	WEST LEG
	Peppers Corner Road	Peppers Corner Road	Central Avenue	
AM				
7:00 - 7:15	0	0	0	
7:15 - 7:30	0	0	0	
7:30 - 7:45	0	0	0	
7:45 - 8:00	0	0	0	
8:00 - 8:15	0	0	0	
8:15 - 8:30	0	0	0	
8:30 - 8:45	0	0	0	
8:45 - 9:00	0	0	0	
TOTALS	0	0	0	0
PM				
4:00 - 4:15	0	0	0	
4:15 - 4:30	0	0	0	
4:30 - 4:45	0	0	0	
4:45 - 5:00	0	0	0	
5:00 - 5:15	0	0	0	
5:15 - 5:30	0	0	0	
5:30 - 5:45	0	0	0	
5:45 - 6:00	0	0	0	
TOTALS	0	0	0	0



Central Avenue Westbound



Peppers Corner Road Northbound



Peppers Corner Road Southbound



Peppers Corner Road
 North of Central Avenue
 Sussex County, Delaware

The Traffic Group, Inc.

(800) 583-8411

www.trafficgroup.com

Merging Innovation and Excellence

Start Time	30-Jul-18		Tue		Wed		Thu		Fri		Weekday Average		Sat		Sun	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	7	4
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	11	2
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	8	3
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	4	2
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3	2
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1	6
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	6	8
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	7	6
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	18	25
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	23	34
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	33	44
11:00	*	*	*	*	*	*	*	*	*	*	*	*	70	97	35	45
12:00 PM	*	*	*	*	*	*	*	*	*	*	*	*	66	106	30	29
01:00	*	*	*	*	*	*	*	*	*	*	*	*	50	85	32	36
02:00	*	*	*	*	*	*	*	*	*	*	*	*	50	75	40	34
03:00	*	*	*	*	*	*	*	*	*	*	*	*	59	93	32	35
04:00	*	*	*	*	*	*	*	*	*	*	*	*	44	67	42	33
05:00	*	*	*	*	*	*	*	*	*	*	*	*	56	53	42	30
06:00	*	*	*	*	*	*	*	*	*	*	*	*	42	36	44	24
07:00	*	*	*	*	*	*	*	*	*	*	*	*	39	26	45	16
08:00	*	*	*	*	*	*	*	*	*	*	*	*	27	16	30	28
09:00	*	*	*	*	*	*	*	*	*	*	*	*	28	20	26	14
10:00	*	*	*	*	*	*	*	*	*	*	*	*	30	22	20	6
11:00	*	*	*	*	*	*	*	*	*	*	*	*	24	14	8	4
Total Day	0	0	0	0	0	0	0	0	0	0	0	0	585	710	547	470
AM Peak Vol.	-	-	-	-	-	-	-	-	-	-	-	-	11:00	11:00	11:00	11:00
PM Peak Vol.	-	-	-	-	-	-	-	-	-	-	-	-	70	97	35	45
AM Peak	-	-	-	-	-	-	-	-	-	-	-	-	12:00	12:00	19:00	13:00
PM Peak	-	-	-	-	-	-	-	-	-	-	-	-	66	106	45	36

Peppers Corner Road
 North of Central Avenue
 Sussex County, Delaware

The Traffic Group, Inc.

(800) 583-8411

www.trafficgroup.com

Merging Innovation and Excellence

Start Time	06-Aug-18		Tue		Wed		Thu		Fri		Weekday Average		Sat		Sun	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	8	3	17	4	6	1	9	5	9	5	10	4	14	5	*	*
01:00	5	5	7	7	5	1	6	1	12	3	7	3	7	4	*	*
02:00	3	2	4	0	7	1	7	2	3	1	5	1	3	4	*	*
03:00	3	1	5	1	1	3	2	1	3	2	3	2	4	1	*	*
04:00	1	1	3	3	4	1	2	3	2	0	2	2	2	1	*	*
05:00	2	5	1	10	5	8	1	4	2	4	2	6	3	6	*	*
06:00	12	17	15	20	12	26	18	21	19	25	15	22	8	8	*	*
07:00	29	59	36	69	40	52	34	52	33	57	34	58	22	30	*	*
08:00	43	56	41	68	30	51	38	41	30	57	36	55	25	41	*	*
09:00	45	56	46	55	48	47	41	54	45	61	45	55	46	47	*	*
10:00	56	68	51	37	49	45	37	32	27	39	44	44	70	54	*	*
11:00	52	51	44	46	44	37	43	36	39	41	44	42	*	*	*	*
12:00 PM	52	45	58	40	48	44	49	36	53	53	52	44	*	*	*	*
01:00	66	46	46	48	51	41	47	48	54	38	53	44	*	*	*	*
02:00	36	50	59	35	50	47	61	39	53	33	52	41	*	*	*	*
03:00	50	40	52	40	66	48	60	44	58	54	57	45	*	*	*	*
04:00	66	58	65	43	60	50	67	67	58	50	63	54	*	*	*	*
05:00	66	39	51	55	54	41	63	50	76	44	62	46	*	*	*	*
06:00	30	38	33	33	32	22	41	35	40	49	35	35	*	*	*	*
07:00	31	24	28	29	33	16	28	33	30	20	30	24	*	*	*	*
08:00	22	16	39	18	29	12	30	16	32	25	30	17	*	*	*	*
09:00	37	13	34	6	21	18	36	14	41	18	34	14	*	*	*	*
10:00	25	12	24	10	29	7	51	13	28	7	31	10	*	*	*	*
11:00	15	11	14	6	15	6	19	4	20	15	17	8	*	*	*	*
Total	755	716	773	683	739	625	790	651	767	701	763	676	204	201	0	0
Day	1471		1456		1364		1441		1468		1439		405		0	
AM Peak	10:00	10:00	10:00	07:00	10:00	07:00	11:00	09:00	09:00	09:00	09:00	07:00	10:00	10:00	-	-
Vol.	56	68	51	69	49	52	43	54	45	61	45	58	70	54	-	-
PM Peak	13:00	16:00	16:00	17:00	15:00	16:00	16:00	16:00	17:00	15:00	16:00	16:00	-	-	-	-
Vol.	66	58	65	55	66	50	67	67	76	54	63	54	-	-	-	-

Comb. Total	1471	1456	1364	1441	1468	1439	1700	1017
ADT	ADT 1,417	AADT 1,417						

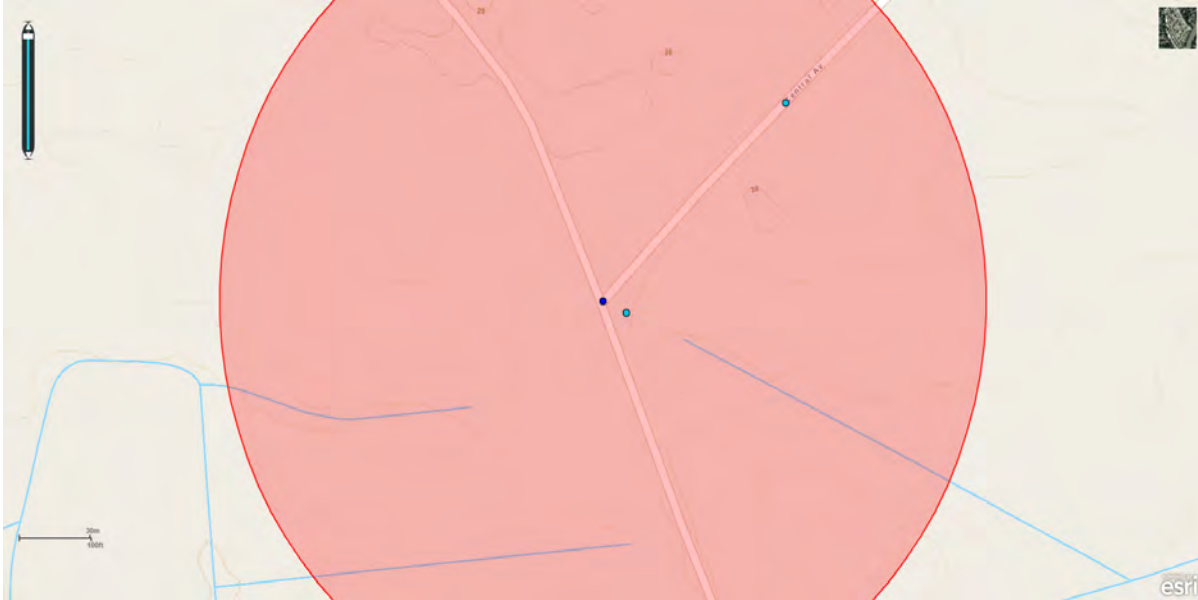
APPENDIX B

Crash Data



Delaware Crash Analysis Reporting System

Crash Study Time Period: 8/27/2015 - 8/27/2018
Query Type: CrashBufferTool
Description: Crash Summary Peppers Corner Road_Bayard Road and Central Ave.
Study Requested By: Betty Tustin- The Traffic Group
Study Generated By: TDTSKLG
Number of Crashes: 2
Includes Non-Reportable Crashes: N
Study Code:



State of Delaware Crash Study

Summary		Classification			Manner of Impact		
	# of Crashes		# of Crashes	% of Total Crashes		# of Crashes	% of Total Crashes
Total Crashes	2	Non-Reportable	0	0.00%	Front to rear	0	0.00%
Fatal Crashes	0	Reportable	2	100.00%	Front to front	0	0.00%
Total Alcohol-Related Crashes	0	Personal Injury	0	0.00%	Angle	1	50.00%
Total Non Alcohol-Related Crashes	2	Fatality	0	0.00%	Sideswipe, same direction	0	0.00%
Total Fatalities	0	Total	2		Sideswipe, opposite direction	0	0.00%
Total Pedestrian Fatalities	0				Rear to side	0	0.00%
Total Pedestrian Injuries	0				Rear to rear	0	0.00%
Total Pedestrian Crashes	0				Other	0	0.00%
Total Motorcycle Crashes	0				Unknown	0	0.00%
Total Pedalcyclist Crashes	0				Not a collision between two vehicles	1	50.00%
					Total	2	

Alcohol Related Crashes By Classification

	Non-reportable	Reportable	Personal Injury	Fatality	Total
Alcohol Related	0	0	0	0	0
Non-Alcohol Related	0	2	0	0	2
Total	0	2	0	0	2

Manner of Impact By Classification

	Non-Reportable	Reportable	Personal Injury	Fatality	Total
Front to rear	0	0	0	0	0
Front to front	0	0	0	0	0
Angle	0	1	0	0	1
Sideswipe, same direction	0	0	0	0	0
Sideswipe, opposite direction	0	0	0	0	0
Rear to side	0	0	0	0	0
Rear to rear	0	0	0	0	0
Other	0	0	0	0	0
Unknown	0	0	0	0	0
Not a collision between two vehicles	0	1	0	0	1
Total	0	2	0	0	2

Disclaimer for CARS: Crash data and associated police reports are intended for DelDOT use only and shall not be transmitted, copied, distributed or provided to any entity other than DelDOT unless written approval is received from the DelDOT Legal Section. Police reports are the property of the Delaware State Police.

Day Of Week		
	# of Crashes	% of Total Crashes
Sunday	0	0.00%
Monday	0	0.00%
Tuesday	1	50.00%
Wednesday	0	0.00%
Thursday	0	0.00%
Friday	0	0.00%
Saturday	1	50.00%
Total	2	

Time Of Day (AM)		
	# of Crashes	% of Total Crashes
00:00 - 00:59	0	0.00%
01:00 - 01:59	0	0.00%
02:00 - 02:59	0	0.00%
03:00 - 03:59	0	0.00%
04:00 - 04:59	0	0.00%
05:00 - 05:59	0	0.00%
06:00 - 06:59	0	0.00%
07:00 - 07:59	0	0.00%
08:00 - 08:59	0	0.00%
09:00 - 09:59	0	0.00%
10:00 - 10:59	0	0.00%
11:00 - 11:59	0	0.00%
Total	0	

Time Of Day (PM)		
	# of Crashes	% of Total Crashes
12:00 - 12:59	0	0.00%
13:00 - 13:59	0	0.00%
14:00 - 14:59	1	50.00%
15:00 - 15:59	0	0.00%
16:00 - 16:59	1	50.00%
17:00 - 17:59	0	0.00%
18:00 - 18:59	0	0.00%
19:00 - 19:59	0	0.00%
20:00 - 20:59	0	0.00%
21:00 - 21:59	0	0.00%
22:00 - 22:59	0	0.00%
23:00 - 23:59	0	0.00%
Total	2	
Unknown Time	0	

Surface Conditions		
	# of Crashes	% of Total Crashes
Dry	0	0.00%
Wet	1	50.00%
Snow	0	0.00%
Ice/Frost	0	0.00%
Sand	0	0.00%
Water (standing, moving)	1	50.00%
Slush	0	0.00%
Oil	0	0.00%
Mud, Dirt, Gravel	0	0.00%
Other	0	0.00%
Unknown	0	0.00%
Total	2	

Lighting Conditions		
	# of Crashes	% of Total Crashes
Daylight	2	100.00%
Dawn	0	0.00%
Dusk	0	0.00%
Dark-Lighted	0	0.00%
Dark-Not Lighted	0	0.00%
Dark-Unknown Lighting	0	0.00%
Other	0	0.00%
Unknown	0	0.00%
Total	2	

Weather Conditions		
	# of Crashes	% of Total Crashes
Clear	0	0.00%
Cloudy	0	0.00%
Fog, Smog, Smoke	0	0.00%
Rain	2	100.00%
Sleet, Hail (freezing rain or drizzle)	0	0.00%
Snow	0	0.00%
Blowing Snow	0	0.00%
Severe Crosswinds	0	0.00%
Blowing Sand, Soil, Dirt	0	0.00%
Other	0	0.00%
Unknown	0	0.00%
Total	2	

First Harmful Event		
	# of Crashes	% of Total Crashes
Overturn/Rollover, Non-Collision	0	0.00%
Fire/Explosion, Non-Collision	0	0.00%
Immersion, Non-Collision	0	0.00%
Jackknife, Non-Collision	0	0.00%
Cargo/Equipment Loss or Shift, Non-Collision	0	0.00%
Fell/Jumped From Motor Vehicle, Non-Collision	0	0.00%
Thrown or Falling Object, Non-Collision	0	0.00%
Other Non-Collision, Non-Collision	0	0.00%
Pedestrian, Collision With Person, Motor Vehicle, or Non-Fixed	0	0.00%
Pedalcycle, Collision With Person, Motor Vehicle, or Non-Fixed	0	0.00%
Railway Vehicle (train, engine), Collision With Person, Motor Vehicle, or Non-Fixed	0	0.00%
Animal, Collision With Person, Motor Vehicle, or Non-Fixed	0	0.00%
Motor Vehicle in Transport, Collision With Person, Motor Vehicle, or Non-Fixed	1	50.00%
Legally Parked Motor Vehicle, Collision With Person, Motor Vehicle, or Non-Fixed	0	0.00%
Struck by Anything Set in Motion by Vehicle, Collision With Person, Motor Vehicle, or Non-Fixed	0	0.00%
Work Zone / Maintenance Equipment, Collision With Person, Motor Vehicle, or Non-Fixed	0	0.00%
Other Non-Fixed Object, Collision With Person, Motor Vehicle, or Non-Fixed	0	0.00%
Impact Attenuator/Crash Cushion, Collision With Fixed Object	0	0.00%
Bridge Overhead Structure, Collision With Fixed Object	0	0.00%
Bridge Pier or Support, Collision With Fixed Object	0	0.00%
Bridge Rail, Collision With Fixed Object	0	0.00%
Cable Barrier, Collision With Fixed Object	0	0.00%
Culvert, Collision With Fixed Object	0	0.00%
Curb, Collision With Fixed Object	0	0.00%
Ditch, Collision With Fixed Object	1	50.00%
Embankment, Collision With Fixed Object	0	0.00%
Guardrail Face, Collision With Fixed Object	0	0.00%
Guardrail End, Collision With Fixed Object	0	0.00%
	0	0.00%

Disclaimer for CARS: Crash data and associated police reports are intended for DelDOT use only and shall not be transmitted, copied, distributed or provided to any entity other than DelDOT unless written approval is received from the DelDOT Legal Section. Police reports are the property of the Delaware State Police.

Concrete Traffic Barrier, Collision With Fixed Object		
Other Traffic Barrier, Collision With Fixed Object	0	0.00%
Tree (standing), Collision With Fixed Object	0	0.00%
Utility Pole, Collision With Fixed Object	0	0.00%
Light Support, Collision With Fixed Object	0	0.00%
Traffic Sign Support, Collision With Fixed Object	0	0.00%
Overhead Sign Support, Collision With Fixed Object	0	0.00%
Traffic Signal Support, Collision With Fixed Object	0	0.00%
Fence, Collision With Fixed Object	0	0.00%
Mailbox, Collision With Fixed Object	0	0.00%
Other Post, Pole or Support, Collision With Fixed Object	0	0.00%
Other Fixed Object (wall, building, tunnel, etc.), Collision With Fixed Object	0	0.00%
Illegally Parked Motor Vehicle, Collision With Person, Vehicle, Or Object Not Fixed	0	0.00%
Stopped Motor Vehicle, Collision With Person, Vehicle, Or Object Not Fixed	0	0.00%
Unknown, Collision With Fixed Object	0	0.00%
Total	2	

Primary Contributing Circumstance		
	# of Crashes	% of Total Crashes
Speeding	0	0.00%
Failed to yield right of way	0	0.00%
Passed Stop Sign	0	0.00%
Disregard Traffic Signal	0	0.00%
Wrong side or wrong way	0	0.00%
Improper passing	0	0.00%
Improper lane change	0	0.00%
Following too close	0	0.00%
Made improper turn	0	0.00%
Driving under the influence	0	0.00%
Driver inattention, distraction, or fatigue	0	0.00%
Driving in a careless or reckless manner	2	100.00%
Driving in an aggressive manner	0	0.00%
Improper backing	0	0.00%
Other improper driving	0	0.00%
Mechanical defects	0	0.00%
Animal in Roadway - Deer	0	0.00%
Animal in Roadway - Other Animal	0	0.00%
Other environmental circumstances - weather, glare	0	0.00%
Roadway circumstances - debris, holes, work zone,	0	0.00%
Other	0	0.00%
Unknown	0	0.00%
Total	2	

Disclaimer for CARS: Crash data and associated police reports are intended for DelDOT use only and shall not be transmitted, copied, distributed or provided to any entity other than DelDOT unless written approval is received from the DelDOT Legal Section. Police reports are the property of the Delaware State Police.

Driver Action		
	# of Drivers	% of Total Crashes
No Contributing Action	1	33.33%
Failed to yield right of way	0	0.00%
Ran Red Light	0	0.00%
Ran Stop Sign	0	0.00%
Disregard other traffic sign	0	0.00%
Disregard other road markings	0	0.00%
Exceeded authorized speed limit	0	0.00%
Driving too fast for conditions	1	33.33%
Made an improper turn	0	0.00%
Improper backing	0	0.00%
Wrong side or wrong way	0	0.00%
Followed too closely	0	0.00%
Failure to keep in proper lane	0	0.00%
Ran off roadway	0	0.00%
Operating vehicle in erratic, reckless, careless, negligent or aggressive manner	1	33.33%
Swerving or avoiding due to wind, slippery surface, vehicle, object, non-motorist in roadway, etc.	0	0.00%
Over-correcting/over-steering	0	0.00%
Improper Passing	0	0.00%
Other Contributing Action	0	0.00%
Unknown	0	0.00%
Total	3	

Disclaimer for CARS: Crash data and associated police reports are intended for DelDOT use only and shall not be transmitted, copied, distributed or provided to any entity other than DelDOT unless written approval is received from the DelDOT Legal Section. Police reports are the property of the Delaware State Police.

CTY	RD	MP	C-MP	DIR	COMP/HQ#	Date	Time	Day	Fat	Inj	AL	LC	WC	SC	FHE	PC	Class	MOI
2017																		
S	00084	0.74	0.74	1	0417054663	08/15/2017	16:53	3	0	0	N	01	04	02	13	12	02	03
S	00084	0.8	0.80	1	0417059533	09/02/2017	14:08	7	0	0	N	01	04	06	25	12	02	00

Report generated by TDTSKLG at 2018-08-27 08:37:57.255

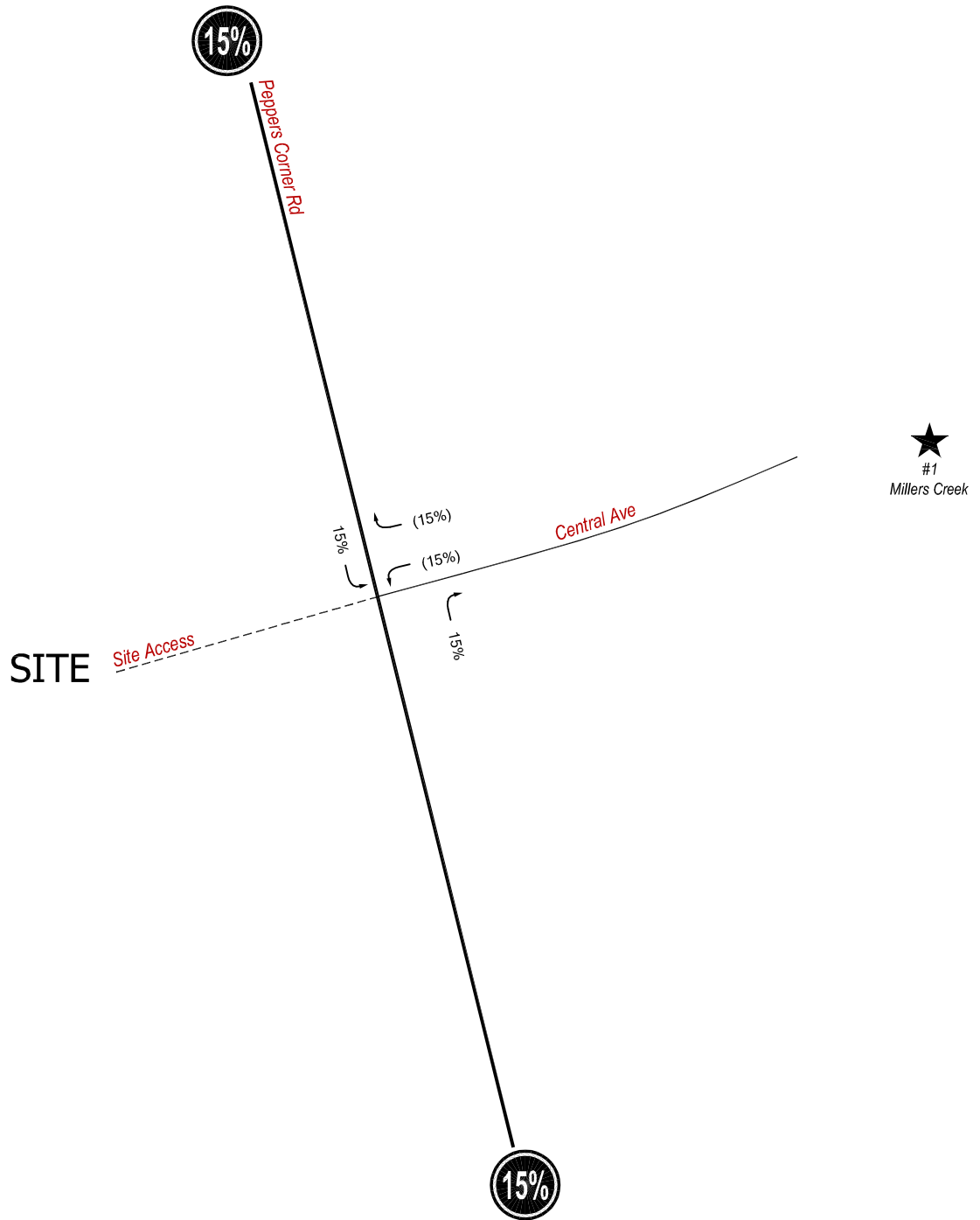
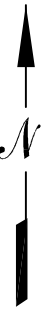
Report Legend

- Cty - County
- Rd - Maintenance Road
- MP - Milepoint
- C-MP - Continuous Milepoint
- Dir - Direction of Highway
- COMP/HQ# - Complaint Number/Headquarters Number
- DAY - Day Of Week Code
- Fat - Fatality
- Inj - Injury
- AL - Alcohol Involved
- LC - Lighting Condition
- WC - Weather Condition
- SC - Surface Condition
- MHE - Most Harmful Event
- PC - Primary Contributing Circumstance
- Class - Report Classification
- MOI - Manner of Impact

APPENDIX C

Committed Development Worksheets





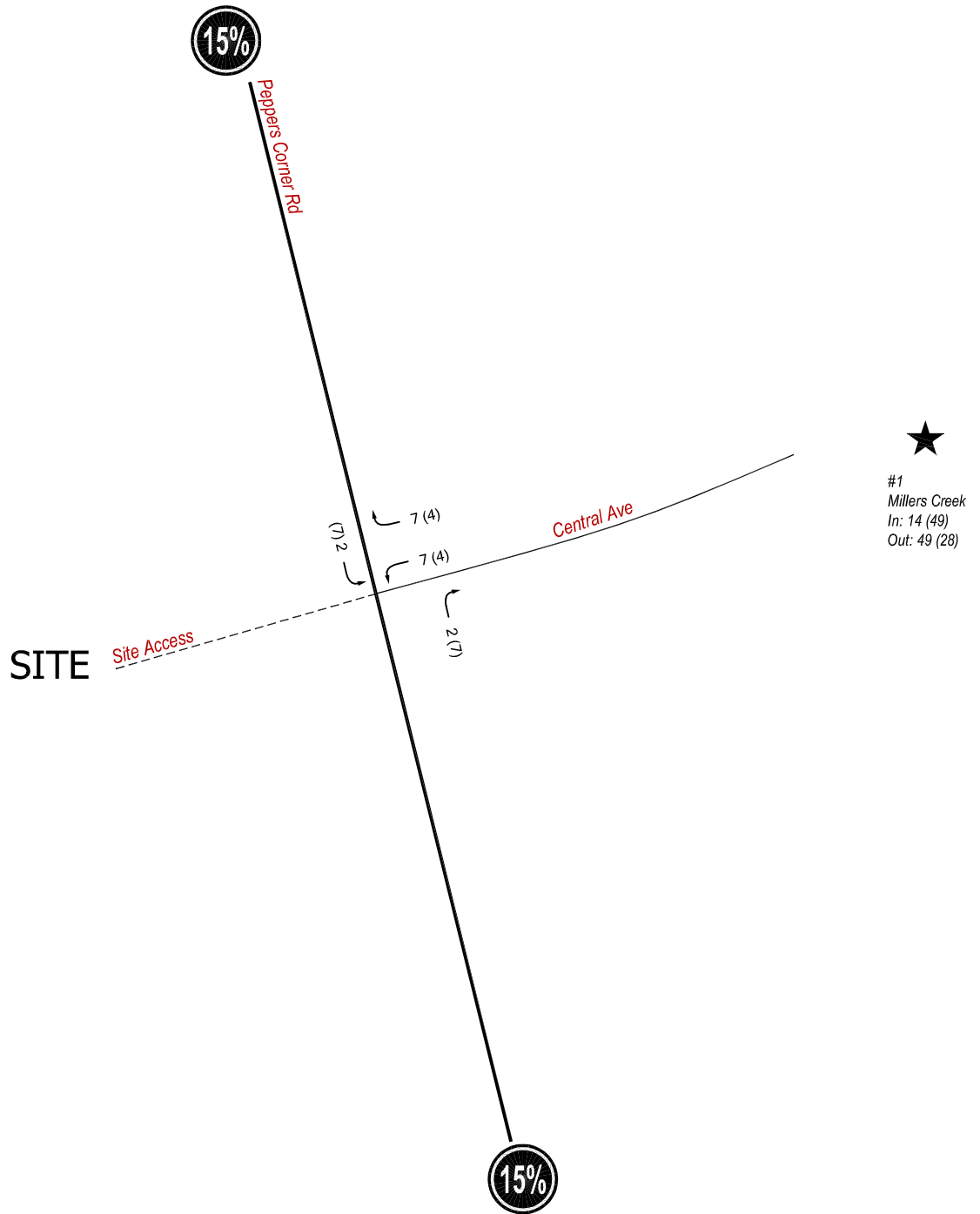
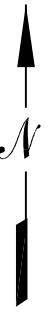
Note: Trip percentage based on TIS for Millville By The Sea, dated 6/10/2013, prepared by TTG, Inc.



NOT TO SCALE

0% : PERCENT OF INBOUND TRIPS
(0%) : PERCENT OF OUTBOUND TRIPS

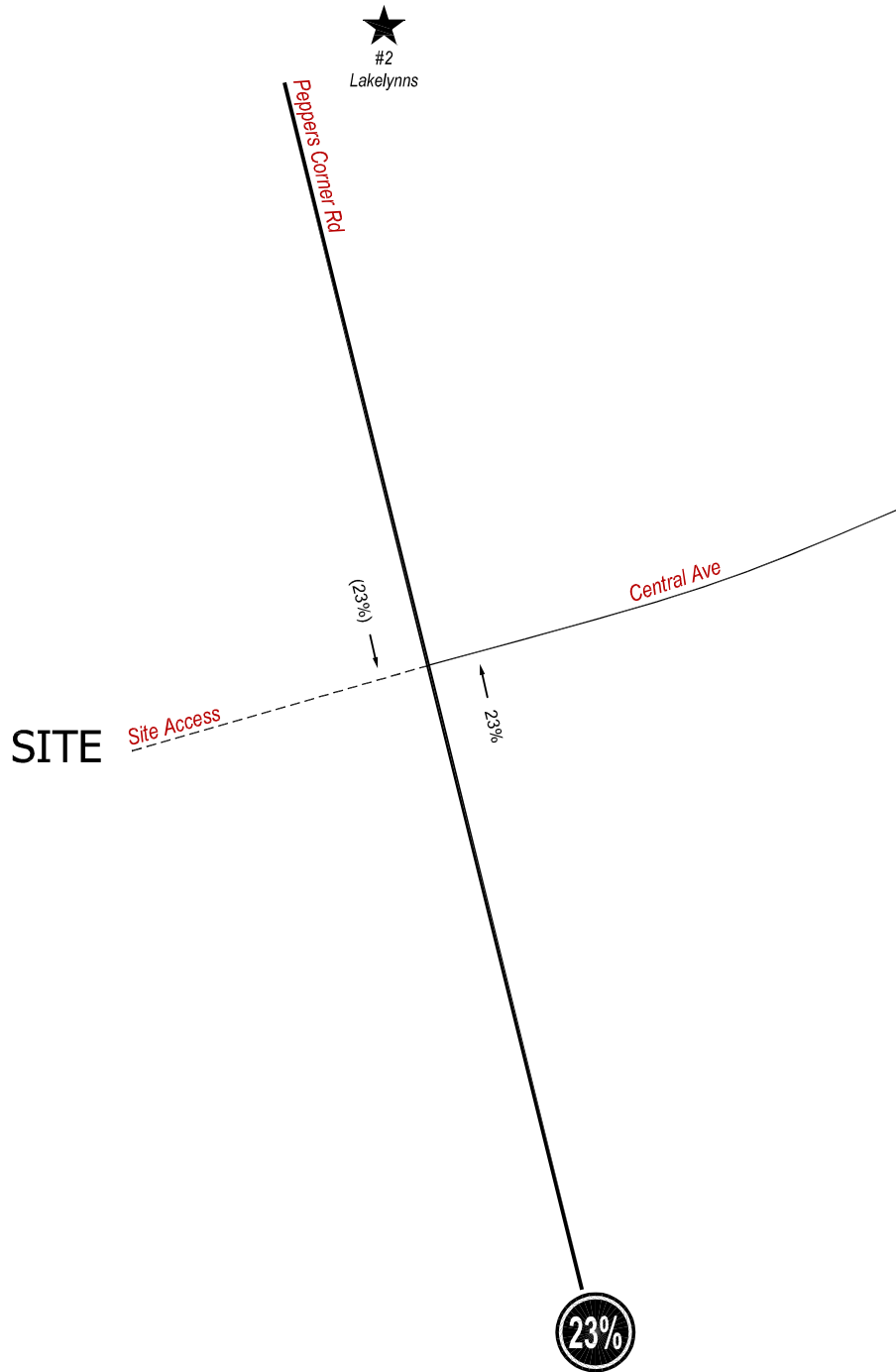
EXHIBIT C-1A
TRIP DISTRIBUTION FOR
COMMITTED DEVELOPMENT #1
MILLERS CREEK



NOT TO SCALE

00 - MORNING PEAK HOUR
(00) - EVENING PEAK HOUR

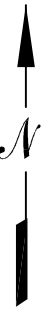
EXHIBIT C-1B
TRIP ASSIGNMENT FOR
COMMITTED DEVELOPMENT #1
MILLERS CREEK



NOT TO SCALE

0% : PERCENT OF INBOUND TRIPS
(0%) : PERCENT OF OUTBOUND TRIPS

EXHIBIT C-2A
TRIP DISTRIBUTION FOR
COMMITTED DEVELOPMENT #2
LAKELYNN



#2
Lakelynns
In: 24 (81)
Out: 80 (47)

Peppers Corner Rd

Central Ave

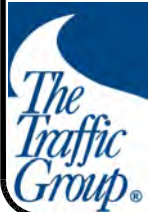
SITE

Site Access

(11) 18

6 (19)

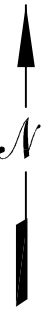
23%



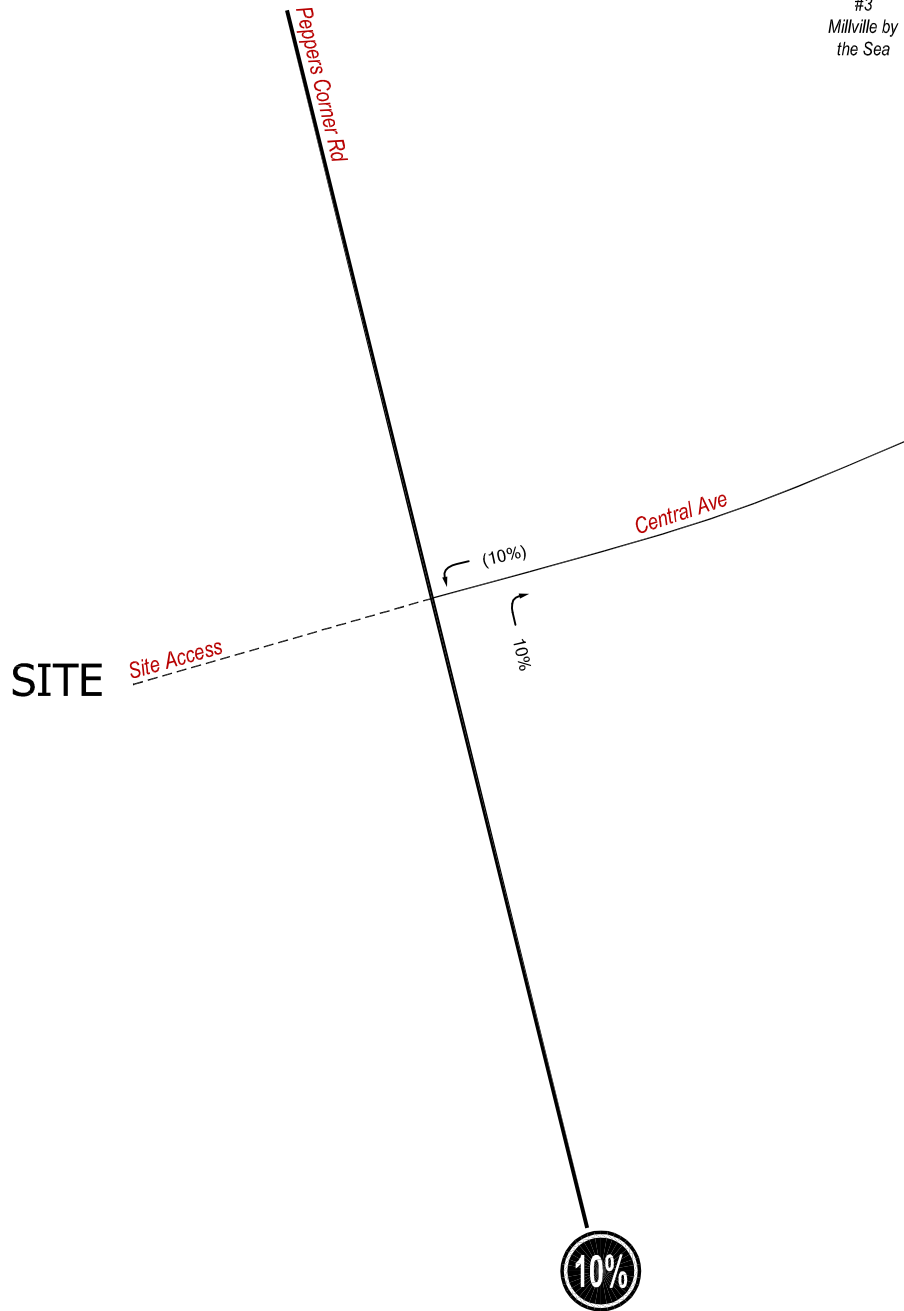
NOT TO SCALE

00 - MORNING PEAK HOUR
(00) - EVENING PEAK HOUR

EXHIBIT C-2B
TRIP ASSIGNMENT FOR
COMMITTED DEVELOPMENT #2
LAKELYNNS



★
#3
Millville by
the Sea



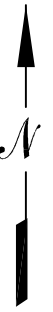
Note: Trip percentage based on TIS for Millville By The Sea, dated 6/10/2013, prepared by TTG, Inc.



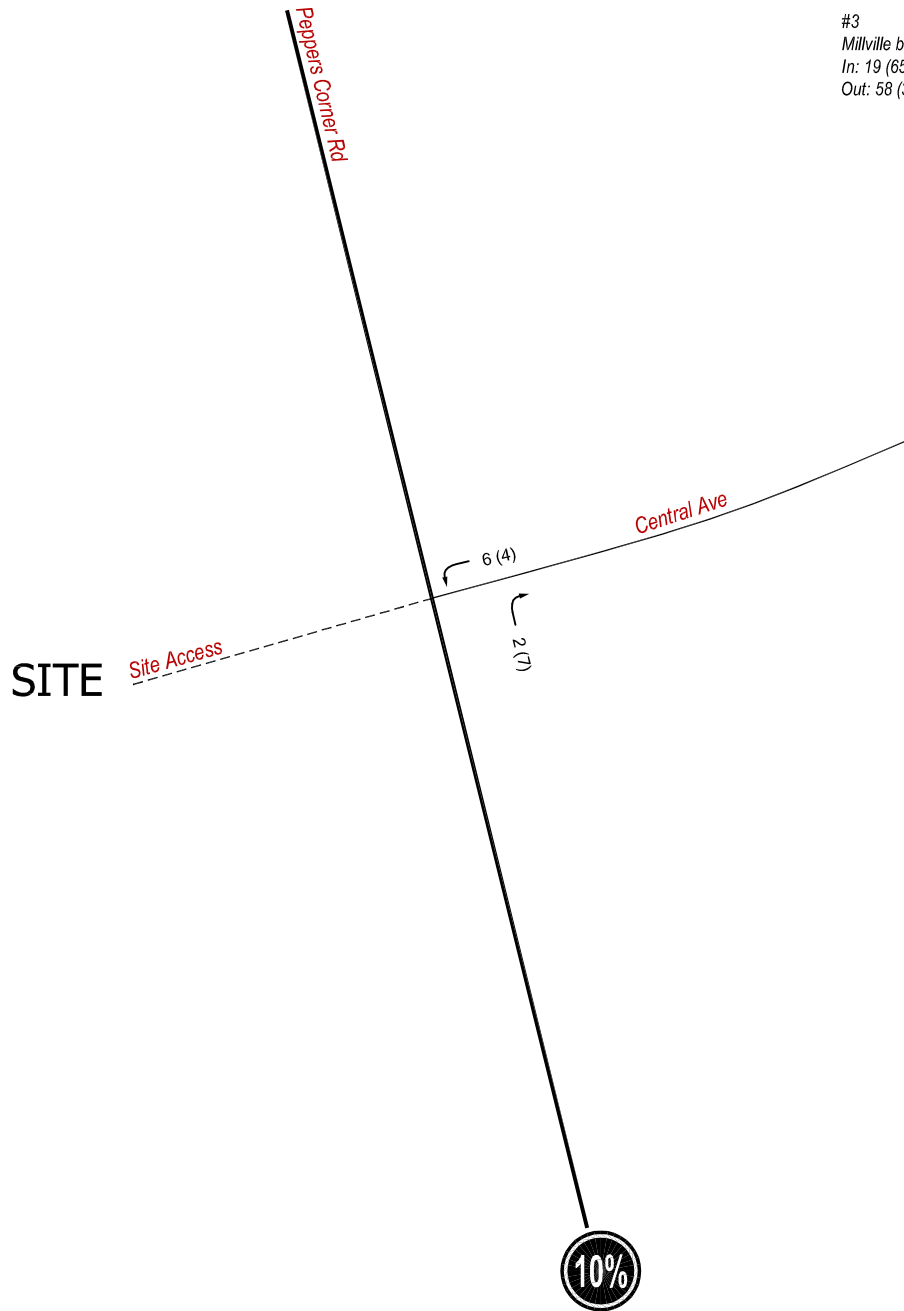
NOT TO SCALE

0% : PERCENT OF INBOUND TRIPS
(0%) : PERCENT OF OUTBOUND TRIPS

EXHIBIT C-3A
TRIP DISTRIBUTION FOR
COMMITTED DEVELOPMENT #3
MILLVILLE BY THE SEA



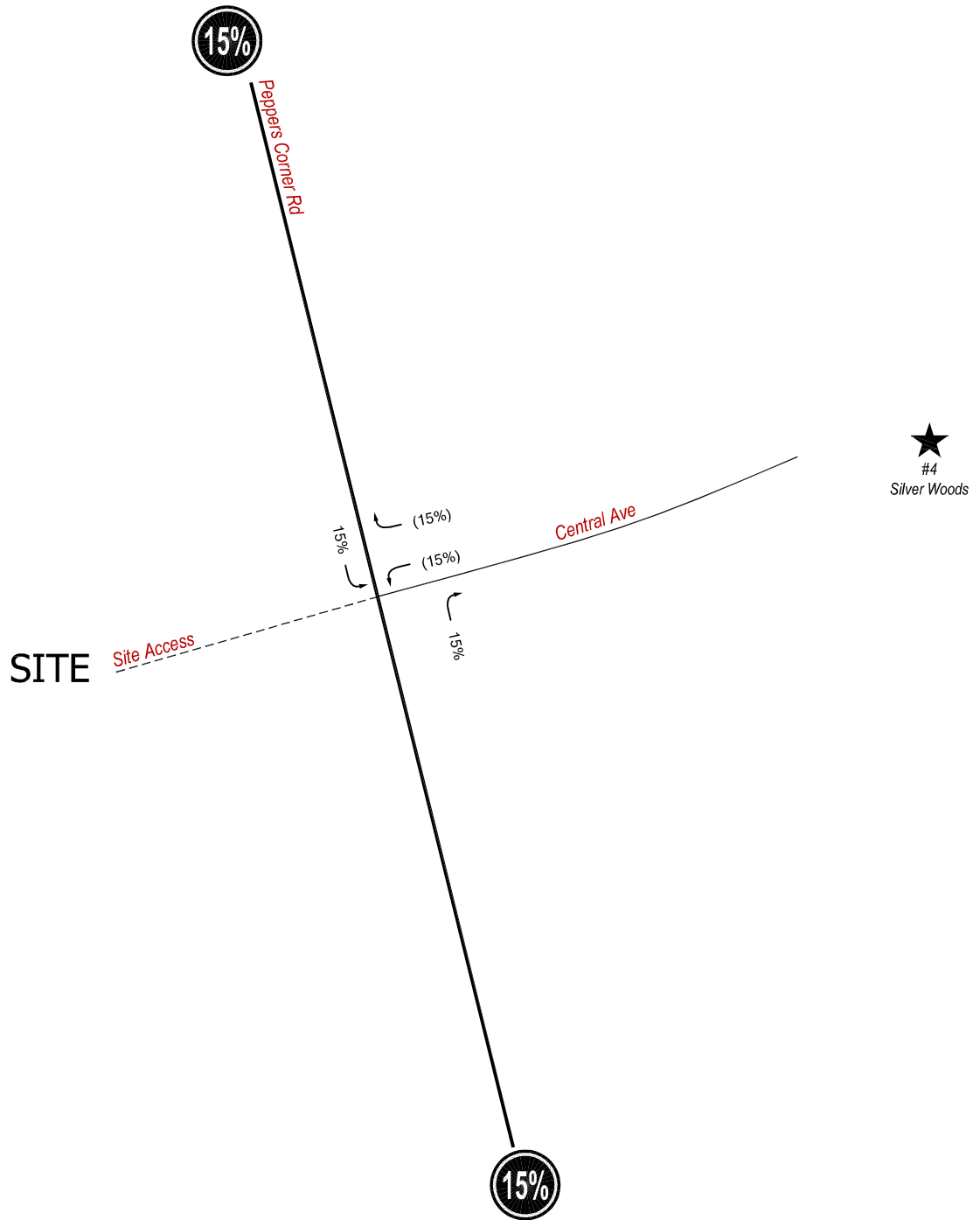
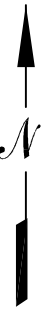
#3
Millville by the Sea
In: 19 (65)
Out: 58 (38)



NOT TO SCALE

00 - MORNING PEAK HOUR
(00) - EVENING PEAK HOUR

EXHIBIT C-3B
TRIP ASSIGNMENT FOR
COMMITTED DEVELOPMENT #3
MILLVILLE BY THE SEA



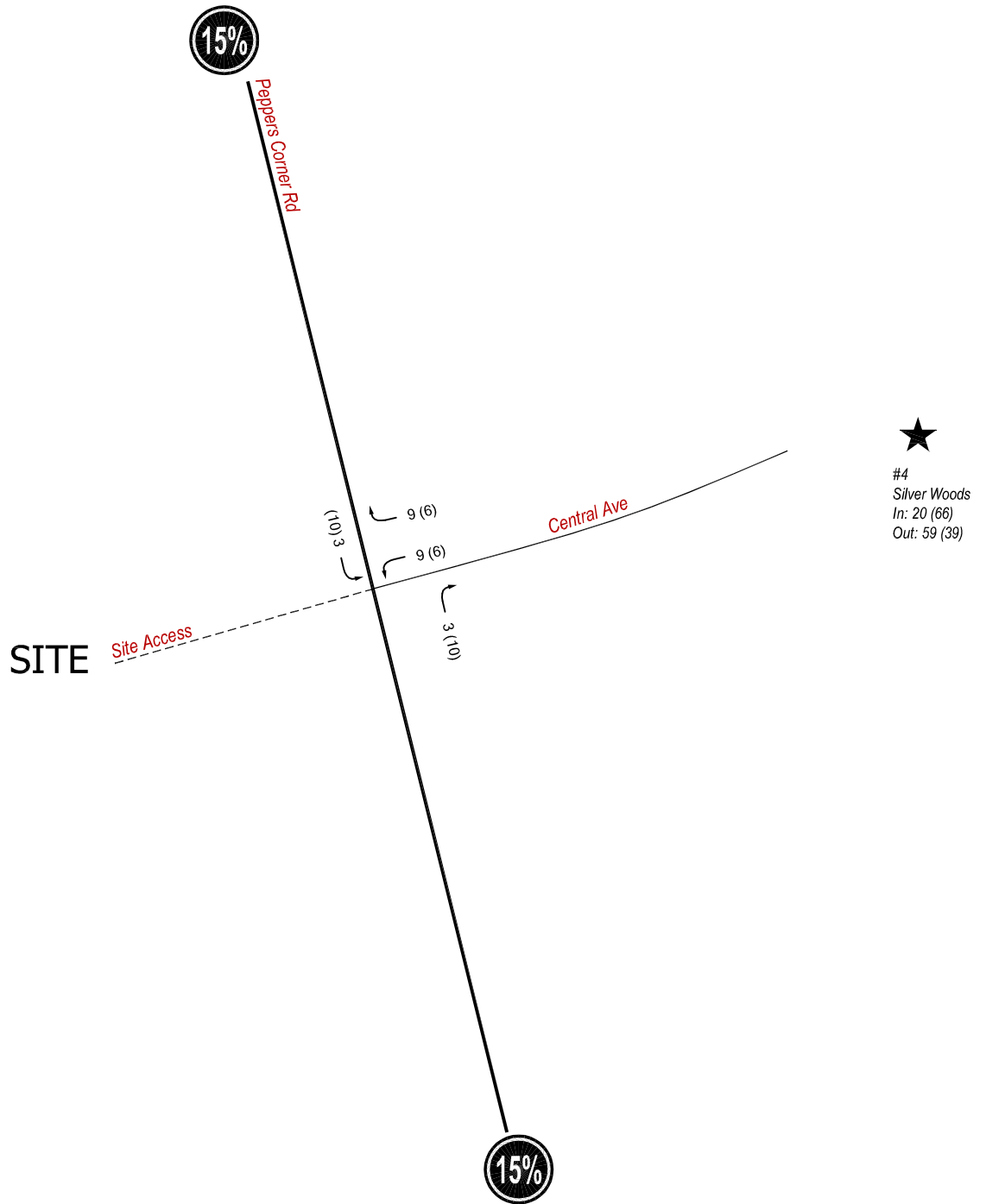
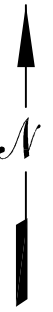
Note: Trip percentage based on TIS for Millville By The Sea, dated 6/10/2013, prepared by TTG, Inc.



NOT TO SCALE

0% : PERCENT OF INBOUND TRIPS
(0%) : PERCENT OF OUTBOUND TRIPS

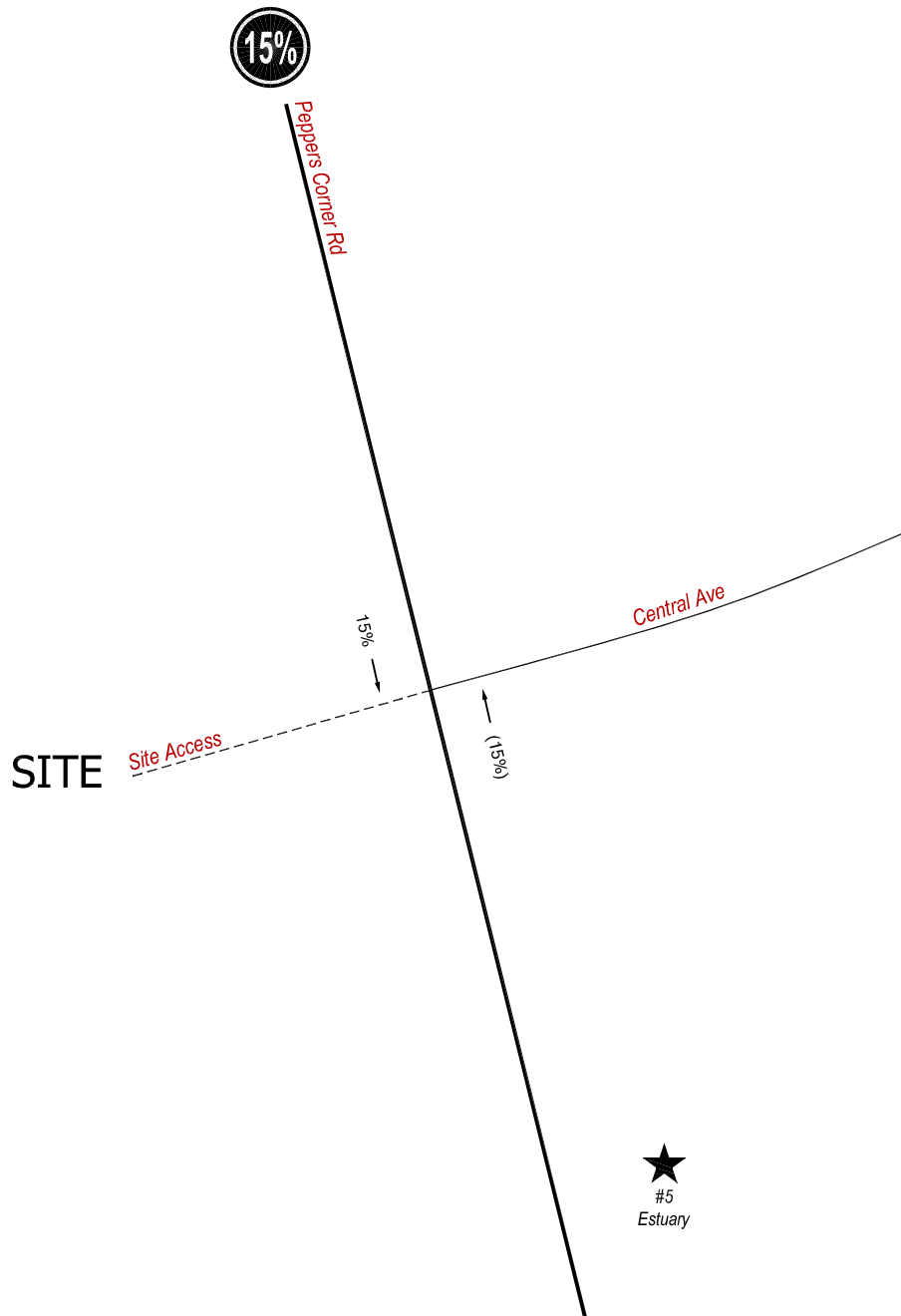
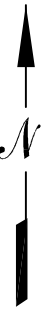
EXHIBIT C-4A
TRIP DISTRIBUTION FOR
COMMITTED DEVELOPMENT #4
SILVER WOODS



NOT TO SCALE

00 - MORNING PEAK HOUR
(00) - EVENING PEAK HOUR

EXHIBIT C-4B
TRIP ASSIGNMENT FOR
COMMITTED DEVELOPMENT #4
SILVER WOODS

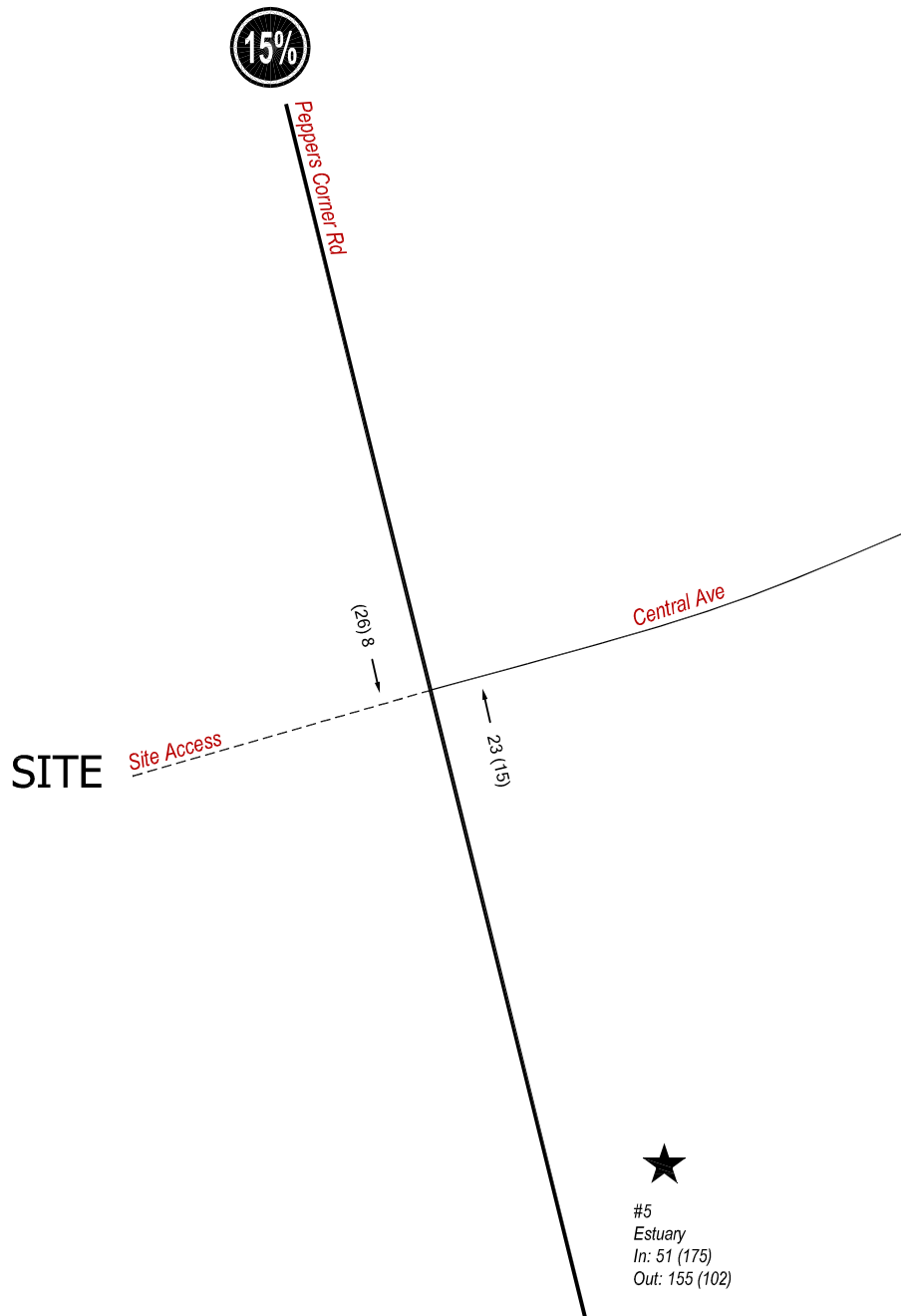
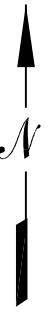


Note: Trip percentage based on TIS for Estuary, dated 8/17/2006, prepared by TTG, Inc.



NOT TO SCALE

EXHIBIT C-5A
TRIP DISTRIBUTION FOR
COMMITTED DEVELOPMENT #5
ESTUARY



NOT TO SCALE

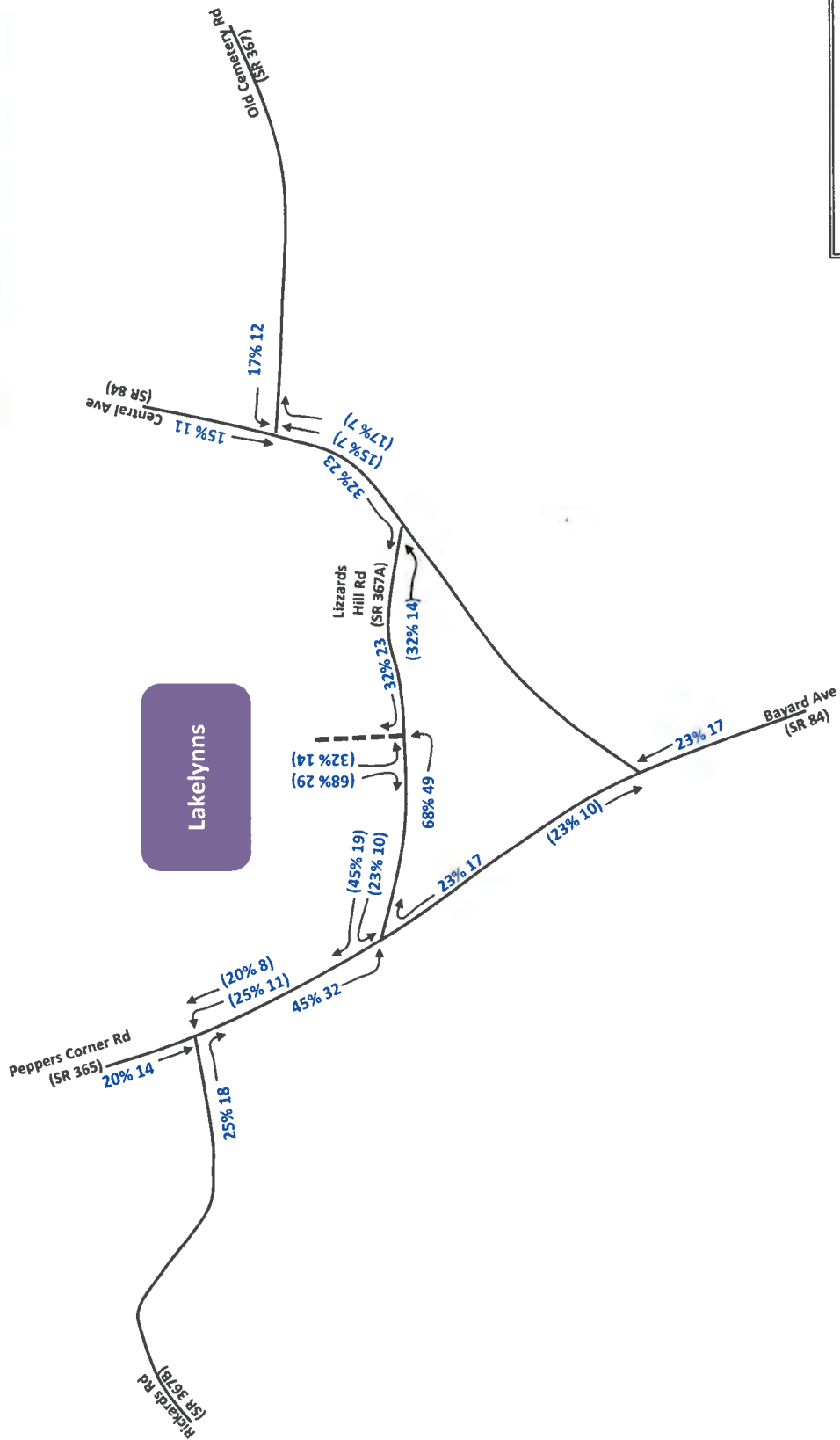
00 - MORNING PEAK HOUR
(00) - EVENING PEAK HOUR

EXHIBIT C-5B
TRIP ASSIGNMENT FOR
COMMITTED DEVELOPMENT #5
ESTUARY

PM Peak Distribution / Assignment
July 24, 2018

Lakelynn's TIS
Trip Generation
211 Low-Rise Multi-family (ITE 10 LUC 220)

	IN	OUT
Weekday ADT	777	777
PM Peak	72	43



Legend

- State-maintained road
- Site Entrance
- Traffic lost / gained before intersections
- State-maintained Intersections
- Inbound Trips (XX)
- Outbound Trips (XX)

Note: Figure Not Drawn to Scale

APPENDIX D

Intersection Capacity

Analysis Worksheets

AVAILABLE UPON REQUEST



APPENDIX E

Correspondence





A SERVICE DISABLED
VETERAN-OWNED
SMALL BUSINESS

Delmarva Region
104 Kenwood Court
Berlin, Maryland 21811
Phone: 443.290.4060
Cell: 410.603.6251

Corporate Office
Baltimore, MD
1.800.583.8411

FIELD OFFICE LOCATIONS

Arkansas
Arizona
Georgia
Maryland
New York
North Carolina
Ohio
South Carolina
Texas
Utah
Virginia
Washington State
West Virginia

August 30, 2018

Mr. T. William Brockenbrough, Jr., P.E., AICP
County Coordinator
Division of Planning
Delaware Department of Transportation
P.O. Box 778
Dover, Delaware 19903

RE: Willow Run
TRAFFIC COUNT SUBMITTAL
Sussex County, Delaware
Our Job No.: 2018-0733

Dear Mr. Brockenbrough:

We are pleased to submit the traffic counts for the proposed residential development, Willow Run, to be located on the west side of Peppers Corner Road (Sussex Road 365) opposite Central Avenue (Sussex Road 84) in Sussex County, Delaware. One full access is proposed along Peppers Corner Road, opposite of Central Avenue with construction anticipated to be completed in 2022.

As noted in the Minutes of the Scoping Meeting, dated August 29, 2018, copy contained in Appendix E, Gulfstream Development, LLC seeks to develop 100 single family detached houses on an approximately 56.61-acre assemblage of parcels (Tax Parcels: 134-18.00-55.00, 134-19.00-5.00 and 6.00). The property is zoned AR-1 (Agricultural Residential) and the no change in zone is desired.

The Traffic Impact Analysis will evaluate conditions at the following intersection for capacity and level of service using the Highway Capacity Software (HCS).

1. Site Access/Peppers Corner Road (Sussex Road 365).

Turning movement counts were collected from 7-9 AM and from 4-6 PM on a weekday in August 2018. Separate counts of heavy vehicles and pedestrians were conducted. Please note that there were no observations of pedestrians. A seven-day machine count was collected on Peppers Corner in the vicinity of the proposed site access.

As requested in the minutes of the Scoping Meeting, seasonal adjustment factors were applied to the turning movement counts.

Given that the Scope for this TIS includes only one intersection, we have also provided the trip generation rates, distributions, and assignments for both the proposed development and the committed developments. The Minutes of the Scoping Meeting identified five committed developments to be included in the Traffic Impact Study. Unit counts were confirmed by plans documented on Sussex County's website and via site plans for various developments. The unit count for the proposed Lakelynn development was conservatively estimated. The proposed trip distributions were primarily obtained from previous Traffic Impact Studies are provided in Appendix C.

The following Exhibits and Appendices are enclosed for your review.

- Exhibit 1 – Site Location Map
- Exhibit 1A – Site Sketch Plan
- Exhibit 2 – Existing Lane Use
- Exhibit 3 – Existing Peak Hour Traffic Volumes
- Exhibit 3A – Existing Peak Hour Traffic Volumes (Heavy Vehicle)
- Exhibit 3B – Existing Peak Hour Traffic Volumes (Right Turn on Red)
- Exhibit 4 – Seasonally Adjusted Existing Peak Hour Traffic Volumes
- Exhibit 5 - Reserved
- Exhibit 6 – Location Map for Committed Developments
- Exhibit 7 – Trip Generation Rates and Totals for Committed Developments
- Exhibit 8 – Combined Trips Generated by Committed Developments
- Exhibit 9 - Reserved
- Exhibit 10 – Trip Generation Rates and Totals for Subject Site
- Exhibit 11A – Trip Distribution for Subject Site
- Exhibit 11B – Trip Assignment for Subject Site
- Exhibit 12 - Reserved
- Appendix A – Intersection Turning Movement Counts and Machine Counts
- Appendix B – Reserved for Crash Data
- Appendix C – Committed Development Worksheets
- Appendix D – Reserved for Intersection Capacity Analysis Worksheets
- Appendix E – Correspondence

If you have any questions or require any additional information regarding this submittal, please do not hesitate to contact me at btustin@trafficgroup.com or 443-513-4128.

Sincerely,



Betty H. Tustin, P.E., PTOE
Project Manager

BHT:mlj

(F:\2018\2018-0733_Willow Run\DOCS\CORRESP\ANALYST\Ltr_Traffic Count Submittal_Brockenbrough.docx)

Betty Tustin

From: Aglio, Anthony (DelDOT) <Anthony.Aglia@state.de.us>
Sent: Wednesday, September 26, 2018 8:52 AM
To: Betty Tustin
Subject: RE: Willow Run

MUP along all frontages. We are trying to get a trail along Double Bridges that this can potential hook into.

If shoulder are required the a 5 ft bike lane through the right turn lane, if a left in is needed then a 5 ft bike lane on the property side of the through lane would also be needed.

Same for this one

From: Betty Tustin [mailto:btustin@trafficgroup.com]
Sent: Tuesday, September 25, 2018 12:37 PM
To: Aglio, Anthony (DelDOT) <Anthony.Aglia@state.de.us>
Subject: FW: Willow Run

This one is the most important one. I'd like to submit our report today.

From: Betty Tustin
Sent: Thursday, September 13, 2018 3:01 PM
To: 'Anthony Aglio' <anthony.aglio@state.de.us>
Subject: Willow Run

Hi Anthony

We are conducted Traffic Impact Studies for a project on Peppers Corner Road in Sussex County near Frankford. I've attached a site plan and site location map. Would you please comment on requested bike and ped facilities?

Thank you

Betty

Betty Tustin, P.E., PTOE
Project Manager – Delmarva Region

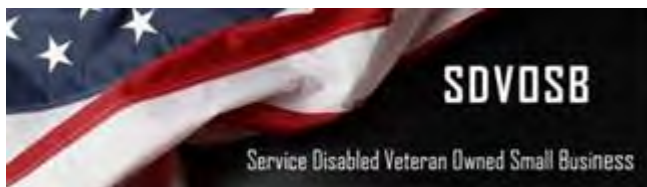


The Traffic Group, Inc.
104 Kenwood Court
Berlin, MD 21236
T 443.290.4060
M 410.603.6251

btustin@trafficgroup.com

www.trafficgroup.com

Merging Innovation and Excellence®



Betty Tustin

From: Dooley, David (DeIDOT) <david.dooley@state.de.us>
Sent: Thursday, September 13, 2018 4:27 PM
To: Betty Tustin
Cc: Smith, Catherine C (DeIDOT); Cherry-Wall, Tremica (DeIDOT); Kauffman, Jared D (DeIDOT)
Subject: RE: willow Run

Betty,

Sidewalks along frontage road and into the entrance of the development?

I do not foresee transit on Peppers Corner Road or Central Avenue anytime soon. (SR17 possibly in the next 5 – 15 years?).

Encourage new residents to ride a bicycle to the bay or the nearest transit stop [bicycle racks on site isn't a bad suggestion, but for the developer to consider]? Or in a few years via canoe? [Florence and hurricane season just beginning!].

Thanks and take care,

David.

From: Betty Tustin [mailto:btustin@trafficgroup.com]
Sent: Thursday, September 13, 2018 3:04 PM
To: Dooley, David (DeIDOT) <david.dooley@state.de.us>
Subject: willow Run

Hi Dave

We are conducted Traffic Impact Studies for a project on Peppers Corner Road in Sussex County near Frankford. I've attached a site plan and site location map. Would you please comment on existing and requested transit facilities? Thank you
Betty



Betty Tustin, P.E., PTOE
Project Manager – Delmarva Region

The Traffic Group, Inc.
104 Kenwood Court
Berlin, MD 21236
T 443.290.4060
M 410.603.6251

btustin@trafficgroup.com
www.trafficgroup.com

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DESIGN SUMMARY AND SUPPLEMENTAL DATA

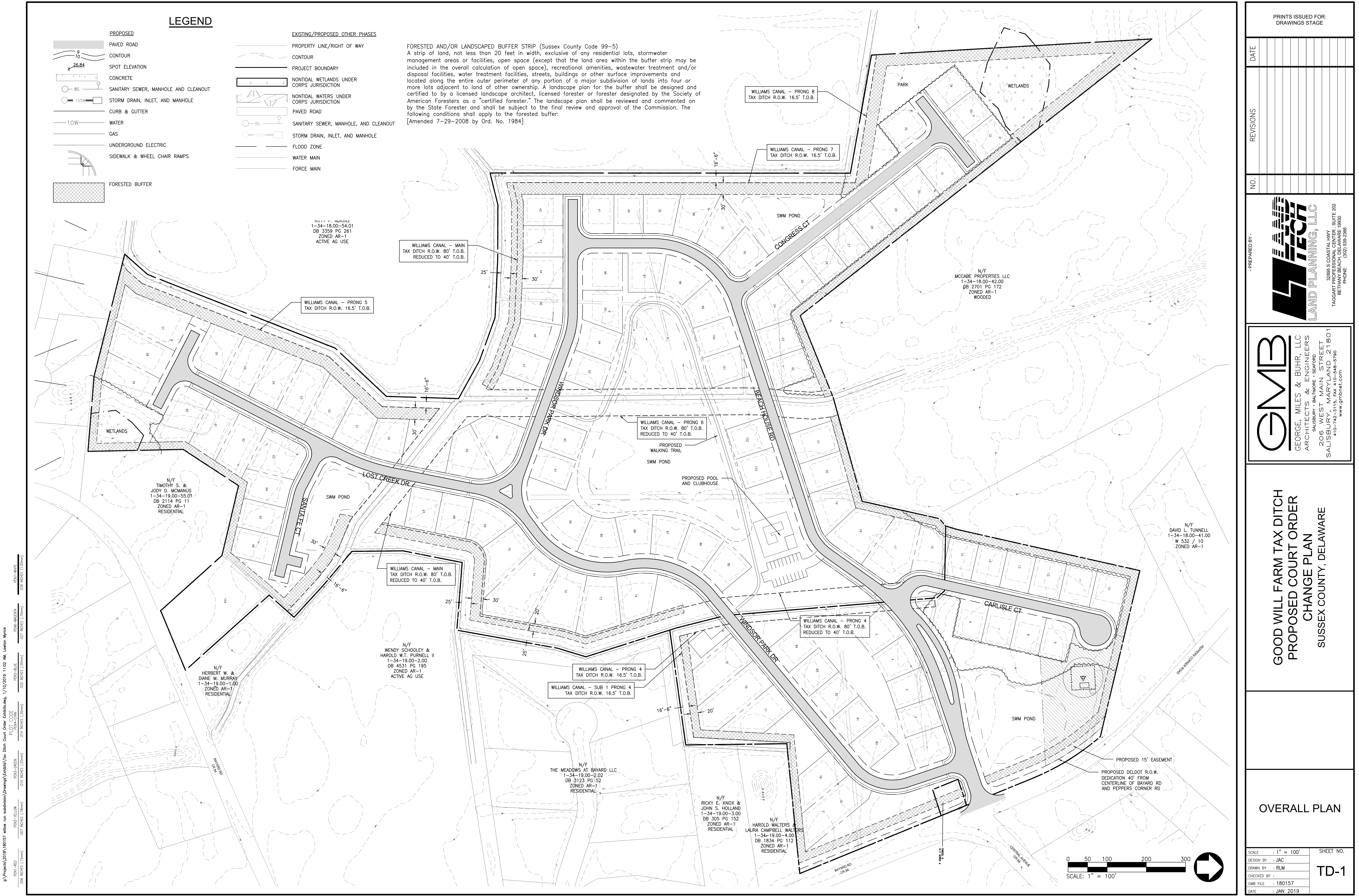
GOOD WILL FARM SUBDIVISION

**TAX DITCH
PROPOSED
COURT ORDER CHANGES**

LEGEND

- | | |
|--------------------------------------|--|
| PROPOSED | EXISTING/PROPOSED OTHER PHASES |
| PAVED ROAD | PROPERTY LINE/RIGHT OF WAY |
| CONTOUR | CONTOUR |
| SPOT ELEVATION | PROJECT BOUNDARY |
| CONCRETE | NONTIDAL WETLANDS UNDER CORPS JURISDICTION |
| SANITARY SEWER, MANHOLE AND CLEANOUT | NONTIDAL WATERS UNDER CORPS JURISDICTION |
| STORM DRAIN, INLET, AND MANHOLE | PAVED ROAD |
| CURB & GUTTER | SANITARY SEWER, MANHOLE, AND CLEANOUT |
| WATER | STORM DRAIN, INLET, AND MANHOLE |
| GAS | FLOOD ZONE |
| UNDERGROUND ELECTRIC | WATER MAIN |
| SIDEWALK & WHEEL CHAIR RAMPS | FORCE MAIN |
| FORESTED BUFFER | |

FORESTED AND/OR LANDSCAPED BUFFER STRIP (Sussex County Code 99-5)
 A strip of land, not less than 20 feet in width, exclusive of any residential lots, stormwater management areas or facilities, open space (except that the land area within the buffer strip may be included in the overall calculation of open space), recreational amenities, wastewater treatment and/or disposal facilities, water treatment facilities, streets, buildings or other surface improvements and located along the entire outer perimeter of any portion of a major subdivision of lands into four or more lots adjacent to land of other ownership. A landscape plan for the buffer shall be designed and certified to by a licensed landscape architect, licensed forester or forester designated by the Society of American Foresters as a "certified forester." The landscape plan shall be reviewed and commented on by the State Forester and shall be subject to the final review and approval of the Commission. The following conditions shall apply to the forested buffer:
 [Amended 7-29-2008 by Ord. No. 1984]



PRINTS ISSUED FOR:
DRAWINGS STAGE

DATE	REVISIONS	NO.

PREPARED BY:

GMB TECH
 LAND PLANNING, LLC
 32895 S. COASTAL HWY., SUITE 202
 TAGGARTS BEACH, DE LAWARE 19840
 PHONE: (302) 539-2366

GMB
 GEORGE, MILES & BUHR, LLC
 ARCHITECTS & ENGINEERS
 SALISBURY - BALTIMORE - SEAFORD
 206 WEST MAIN STREET
 SALISBURY, MARYLAND 21801
 410-742-3115, FAX 410-548-5790
 www.gmbnet.com

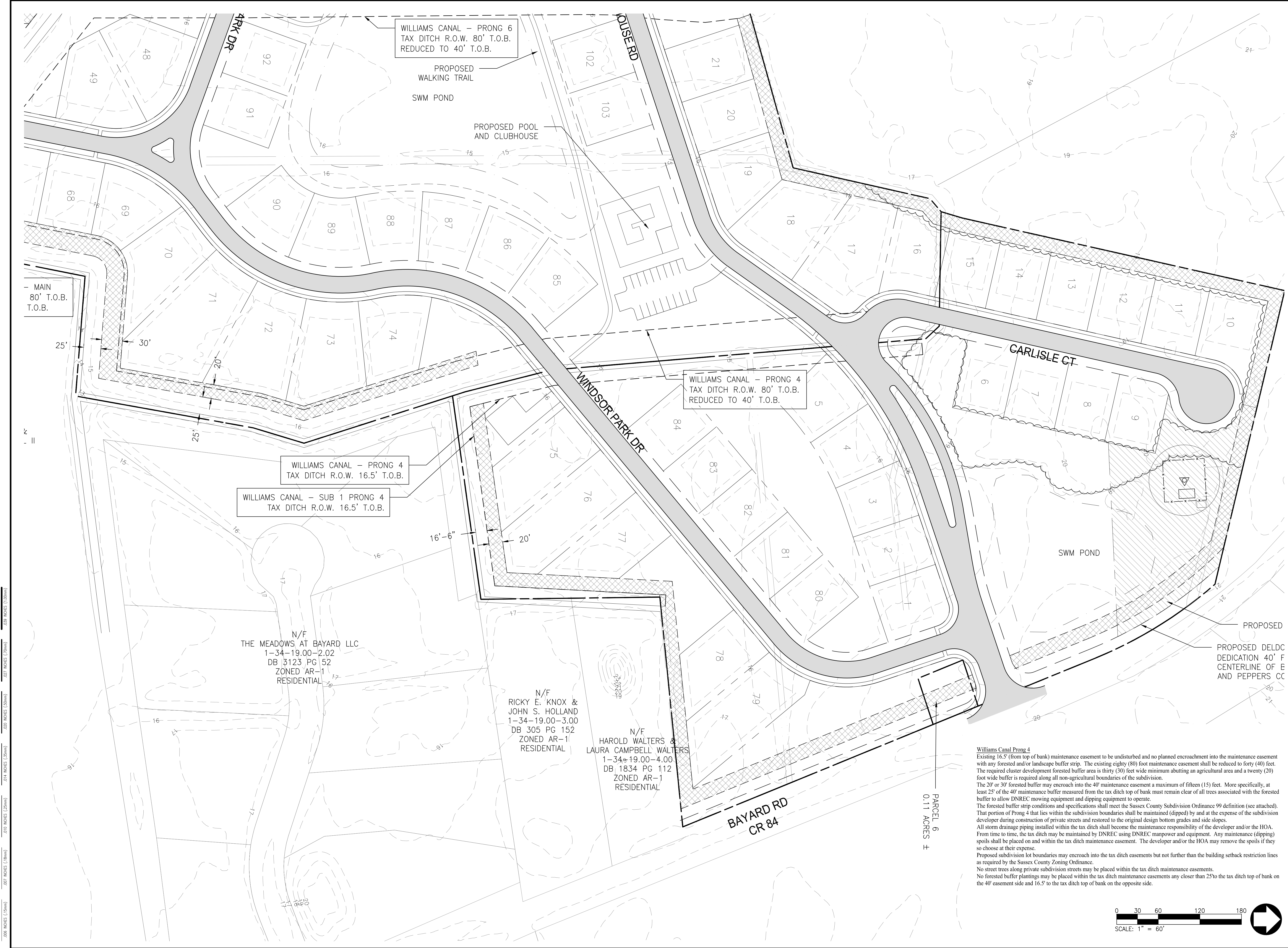
**GOOD WILL FARM TAX DITCH
 PROPOSED COURT ORDER
 CHANGE PLAN
 SUSSEX COUNTY, DELAWARE**

OVERALL PLAN

SCALE: 1" = 100'	SHEET NO.
DESIGN BY: JAC	TD-1
DRAWN BY: RLM	
CHECKED BY:	
GMB FILE: 180157	
DATE: JAN 2019	

© COPYRIGHT 2019 GEORGE, MILES & BUHR, LLC

Plot Code
 PENN-RED 1/20 INCHES (50mm)
 PENN-YELLOW 3/32 INCHES (25mm)
 PENN-GREEN 3/32 INCHES (25mm)
 PENN-BLUE 3/32 INCHES (25mm)
 PENN-ORANGE 3/32 INCHES (25mm)
 PENN-GRAY 3/32 INCHES (25mm)
 PENN-WHITE 3/32 INCHES (25mm)
 1/10/2019 11:02 AM London Myrick



Williams Canal Prong 4
 Existing 16.5' (from top of bank) maintenance easement to be undisturbed and no planned encroachment into the maintenance easement with any forested and/or landscape buffer strip. The existing eighty (80) foot maintenance easement shall be reduced to forty (40) feet. The required cluster development forested buffer area is thirty (30) feet wide minimum abutting an agricultural area and a twenty (20) foot wide buffer is required along all non-agricultural boundaries of the subdivision.
 The 20' or 30' forested buffer may encroach into the 40' maintenance easement a maximum of fifteen (15) feet. More specifically, at least 25' of the 40' maintenance buffer measured from the tax ditch top of bank must remain clear of all trees associated with the forested buffer to allow DNREC mowing equipment and dipping equipment to operate.
 The forested buffer strip conditions and specifications shall meet the Sussex County Subdivision Ordinance 99 definition (see attached). That portion of Prong 4 that lies within the subdivision boundaries shall be maintained (dipped) by and at the expense of the subdivision developer during construction of private streets and restored to the original design bottom grades and side slopes.
 All storm drainage piping installed within the tax ditch shall become the maintenance responsibility of the developer and/or the HOA. From time to time, the tax ditch may be maintained by DNREC using DNREC manpower and equipment. Any maintenance (dipping) spoils shall be placed on and within the tax ditch maintenance easement. The developer and/or the HOA may remove the spoils if they so choose at their expense.
 Proposed subdivision lot boundaries may encroach into the tax ditch easements but not further than the building setback restriction lines as required by the Sussex County Zoning Ordinance.
 No street trees along private subdivision streets may be placed within the tax ditch maintenance easements.
 No forested buffer plantings may be placed within the tax ditch maintenance easements any closer than 25' to the tax ditch top of bank on the 40' easement side and 16.5' to the tax ditch top of bank on the opposite side.

PRINTS ISSUED FOR:
DRAWINGS STAGE

DATE	REVISIONS	NO.

PREPARED BY:
GMB
 LAND PLANNING, LLC
 3286S S COASTAL HWY SUITE 202
 TAGCARTER, DELAWARE
 BETHANY BEACH, DE 19802
 PHONE: (302) 539-2366

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 SALISBURY - BALTIMORE - SEAFORD
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 410-742-3115, FAX 410-548-5790
 www.gmbnet.com

**GOOD WILL FARM TAX DITCH
 PROPOSED COURT ORDER
 CHANGE PLAN
 SUSSEX COUNTY, DELAWARE**

PRONG 4

SCALE: 1" = 60' SHEET NO.
 DESIGN BY: JAC TD-2
 DRAWN BY: RLM
 CHECKED BY:
 GMB FILE: 180157
 DATE: JAN 2019
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N/F
 PJR MANAGEMENT LLC
 1-34-18.00-56.01
 DB 4317 PG 183
 ZONED AR-1 & C-1
 COMMERCIAL

N/F
 NORIS J. SR. &
 KITTY F. ADKINS
 1-34-18.00-54.01
 DB 3359 PG 261
 ZONED AR-1
 ACTIVE AG USE

WILLIAMS CANAL - MAIN
 TAX DITCH R.O.W. 80' T.O.B.
 REDUCED TO 40' T.O.B.

WILLIAMS CANAL - PRONG 5
 TAX DITCH R.O.W. 16.5' T.O.B.

WILLIAMS CANAL - PRONG 6
 TAX DITCH R.O.W. 80' T.O.B.
 REDUCED TO 40' T.O.B.

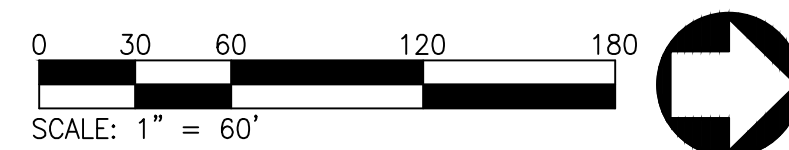
N/F
 TIMOTHY S. &
 JODY D. MCMANUS
 1-34-19.00-55.01
 DB 2114 PG 11
 ZONED AR-1
 RESIDENTIAL

WILLIAMS CANAL - MAIN
 TAX DITCH R.O.W. 80' T.O.B.
 REDUCED TO 40' T.O.B.

N/F
 WENDY SCHOOLEY &
 HAROLD W.T. PURNELL II
 1-34-19.00-2.00

Williams Canal Prong 5
 Existing 16.5' (from top of bank) maintenance easement to be undisturbed and no planned encroachment into the maintenance easement with any forested and/or landscape buffer strip. The required cluster development forested buffer area is thirty (30) feet wide minimum abutting an agricultural area.
 The forested buffer strip conditions and specifications shall meet the Sussex County Subdivision Ordinance 99 definition (see attached). That portion of Prong 5 that lies within the subdivision boundaries shall be maintained (dipped) by and at the expense of the subdivision developer during construction of private streets and restored to the original design bottom grades and side slopes.

Williams Canal Main
 Existing 16.5' (from top of bank) maintenance easement to be undisturbed and no planned encroachment into the maintenance easement with any forested and/or landscape buffer strip. The required cluster development forested buffer area is thirty (30) feet wide minimum abutting an agricultural neighboring land use.
 The 30' forested buffer may encroach into the 40' maintenance easement a maximum of fifteen (15) feet. More specifically, at least 25' of the 40' maintenance buffer measured from the tax ditch top of bank must remain clear of all trees associated with the forested buffer to allow DNREC mowing equipment and dipping equipment to operate.
 The forested buffer strip conditions and specifications shall meet the Sussex County Subdivision Ordinance 99 definition (see attached). That portion of Williams Canal Main that lies within the subdivision boundaries shall be maintained (dipped) by and at the expense of the subdivision developer during construction of private streets and restored to the original design bottom grades and side slopes.
 All storm drainage piping installed within the tax ditch shall become the maintenance responsibility of the developer and/or the HOA. From time to time, the tax ditch may be maintained by DNREC using DNREC manpower and equipment. Any maintenance (dipping) spoils shall be placed on and within the tax ditch maintenance easement. The developer and/or the HOA may remove the spoils if they so choose at their expense.
 Proposed subdivision lot boundaries may encroach into the tax ditch easements but not further than the building setback restriction lines as required by the Sussex County Zoning Ordinance.
 No street trees along private subdivision streets may be placed within the tax ditch maintenance easements.
 No forested buffer plantings may be placed within the tax ditch maintenance easements any closer than 25' to the tax ditch top of bank on the 40' easement side and 16.5' to the tax ditch top of bank on the opposite side.

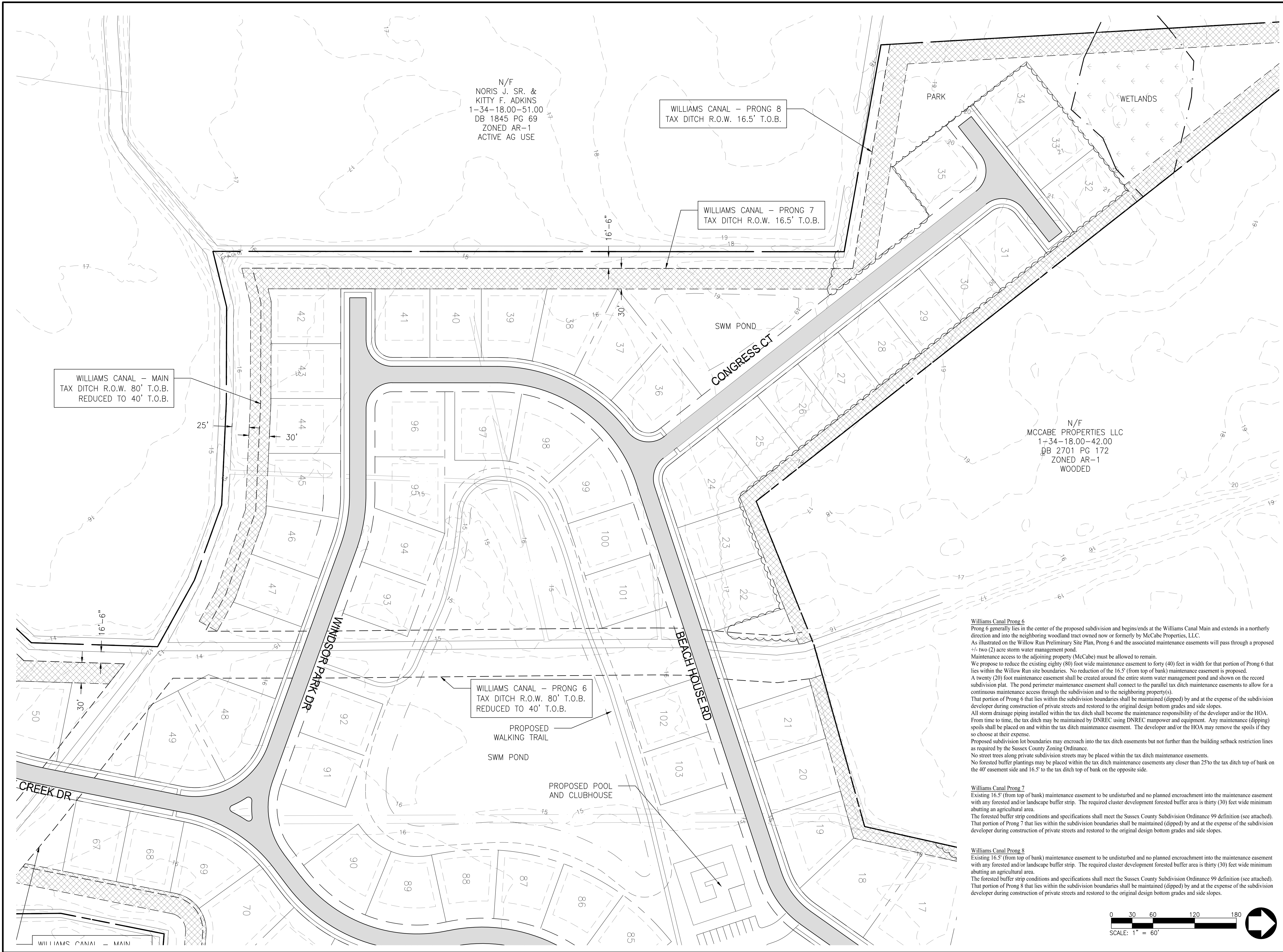


1/10/2019 11:02 AM London Myrick
 PLOT CODE
 PENL-BLUE 207 INCHES (53mm)
 PENL-ORANGE 204 INCHES (52mm)
 PENL-ORANGE 200 INCHES (51mm)
 PENL-ORANGE 200 INCHES (51mm)
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 PENL-ORANGE 200 INCHES (51mm)

PRINTS ISSUED FOR: DRAWINGS STAGE	
DATE	
REVISIONS	
NO.	
PREPARED BY:	 LAND PLANNING, LLC <small>32895 S. COASTAL HWY., SUITE 202 TAGGARTON, DELAWARE 19801 PHONE: (302) 539-2366</small>
 GEORGE, MILES & BUHR, LLC <small>ARCHITECTS & ENGINEERS SALISBURY • BALTIMORE • SEAFORD 206 WEST MAIN STREET SALISBURY, MARYLAND 21801 410-742-3115, FAX 410-548-5790 www.gmbnet.com</small>	
GOOD WILL FARM TAX DITCH PROPOSED COURT ORDER CHANGE PLAN SUSSEX COUNTY, DELAWARE	
PRONGS 5 & MAIN	
SCALE: 1" = 60'	SHEET NO.
DESIGN BY: JAC	TD-3
DRAWN BY: RLM	
CHECKED BY:	
GMB FILE: 180157	
DATE: JAN 2019	

Project: 2019-180157 - Will Farm Tax Ditch Order Exhibit (Scale) 1/10/2019 11:02 AM London Myrick

PRINT-RED 200 INCHES (50mm) PRINT-YELLOW 200 INCHES (50mm) PRINT-ORANGE 200 INCHES (50mm) PRINT-GREEN 200 INCHES (50mm) PRINT-BLUE 200 INCHES (50mm) PRINT-MAGENTA 200 INCHES (50mm) PRINT-WHITE 200 INCHES (50mm)



N/F
NORIS J. SR. &
KITTY F. ADKINS
1-34-18.00-51.00
DB 1845 PG 69
ZONED AR-1
ACTIVE AG USE

WILLIAMS CANAL - PRONG 8
TAX DITCH R.O.W. 16.5' T.O.B.

WILLIAMS CANAL - PRONG 7
TAX DITCH R.O.W. 16.5' T.O.B.

WILLIAMS CANAL - MAIN
TAX DITCH R.O.W. 80' T.O.B.
REDUCED TO 40' T.O.B.

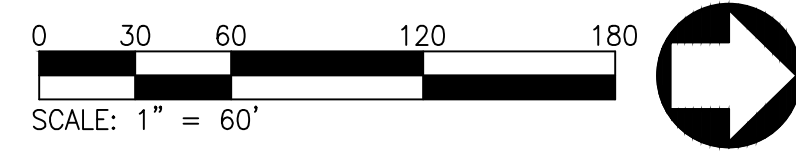
N/F
MCCABE PROPERTIES LLC
1-34-18.00-42.00
DB 2701 PG 172
ZONED AR-1
WOODED

WILLIAMS CANAL - PRONG 6
TAX DITCH R.O.W. 80' T.O.B.
REDUCED TO 40' T.O.B.

Williams Canal Prong 6
Prong 6 generally lies in the center of the proposed subdivision and begins/ends at the Williams Canal Main and extends in a northerly direction and into the neighboring woodland tract owned now or formerly by McCabe Properties, LLC.
As illustrated on the Willow Run Preliminary Site Plan, Prong 6 and the associated maintenance easements will pass through a proposed +/- two (2) acre storm water management pond.
Maintenance access to the adjoining property (McCabe) must be allowed to remain.
We propose to reduce the existing eighty (80) foot wide maintenance easement to forty (40) feet in width for that portion of Prong 6 that lies within the Willow Run site boundaries. No reduction of the 16.5' (from top of bank) maintenance easement is proposed.
A twenty (20) foot maintenance easement shall be created around the entire storm water management pond and shown on the record subdivision plat. The pond perimeter maintenance easement shall connect to the parallel tax ditch maintenance easements to allow for a continuous maintenance access through the subdivision and to the neighboring property(s).
That portion of Prong 6 that lies within the subdivision boundaries shall be maintained (dipped) by and at the expense of the subdivision developer during construction of private streets and restored to the original design bottom grades and side slopes.
All storm drainage piping installed within the tax ditch shall become the maintenance responsibility of the developer and/or the HOA. From time to time, the tax ditch may be maintained by DNREC using DNREC manpower and equipment. Any maintenance (dipping) spoils shall be placed on and within the tax ditch maintenance easement. The developer and/or the HOA may remove the spoils if they so choose at their expense.
Proposed subdivision lot boundaries may encroach into the tax ditch easements but not further than the building setback restriction lines as required by the Sussex County Zoning Ordinance.
No street trees along private subdivision streets may be placed within the tax ditch maintenance easements.
No forested buffer plantings may be placed within the tax ditch maintenance easements any closer than 25' to the tax ditch top of bank on the 40' easement side and 16.5' to the tax ditch top of bank on the opposite side.

Williams Canal Prong 7
Existing 16.5' (from top of bank) maintenance easement to be undisturbed and no planned encroachment into the maintenance easement with any forested and/or landscape buffer strip. The required cluster development forested buffer area is thirty (30) feet wide minimum abutting an agricultural area.
The forested buffer strip conditions and specifications shall meet the Sussex County Subdivision Ordinance 99 definition (see attached). That portion of Prong 7 that lies within the subdivision boundaries shall be maintained (dipped) by and at the expense of the subdivision developer during construction of private streets and restored to the original design bottom grades and side slopes.

Williams Canal Prong 8
Existing 16.5' (from top of bank) maintenance easement to be undisturbed and no planned encroachment into the maintenance easement with any forested and/or landscape buffer strip. The required cluster development forested buffer area is thirty (30) feet wide minimum abutting an agricultural area.
The forested buffer strip conditions and specifications shall meet the Sussex County Subdivision Ordinance 99 definition (see attached). That portion of Prong 8 that lies within the subdivision boundaries shall be maintained (dipped) by and at the expense of the subdivision developer during construction of private streets and restored to the original design bottom grades and side slopes.



PRINTS ISSUED FOR: DRAWINGS STAGE	
DATE	
REVISIONS	
NO.	
PREPARED BY:	 GMB TECH LAND PLANNING, LLC 32895 S. COASTAL HWY., SUITE 202 TAGGART, MARYLAND, DE 19804 PHONE: (302) 539-2366
 GEORGE, MILES & BUHR, LLC ARCHITECTS & ENGINEERS SALISBURY • BALTIMORE • SEAFORD 206 WEST MAIN STREET SALISBURY, MARYLAND 21801 410-742-3115, FAX 410-548-5790 www.gmbnet.com	
GOOD WILL FARM TAX DITCH PROPOSED COURT ORDER CHANGE PLAN SUSSEX COUNTY, DELAWARE	
PRONGS 6-7-8	
SCALE : Custom	SHEET NO.
DESIGN BY : JAC	TD-4
DRAWN BY : RLM	
CHECKED BY :	
GMB FILE : 180157	
DATE : JAN 2019	

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

**TAX DITCH
PROPOSED
COURT ORDER CHANGES**

Willow Run Proposed Cluster Major Subdivision Proposed Tax Ditches Court Order Changes and Exhibits

WILLIAMS CANAL PRONG 4

Existing 16.5' (from top of bank) maintenance easement to be undisturbed and no planned encroachment into the maintenance easement with any forested and/or landscape buffer strip. The existing eighty (80) foot maintenance easement shall be reduced to forty (40) feet.

The required cluster development forested buffer area is thirty (30) feet wide minimum abutting an agricultural area and a twenty (20) foot wide buffer is required along all non-agricultural boundaries of the subdivision.

The 20' or 30' forested buffer may encroach into the 40' maintenance easement a maximum of fifteen (15) feet. More specifically, at least 25' of the 40' maintenance buffer measured from the tax ditch top of bank must remain clear of all trees associated with the forested buffer to allow DNREC mowing equipment and dipping equipment to operate.

The forested buffer strip conditions and specifications shall meet the Sussex County Subdivision Ordinance 99 definition (see attached).

That portion of Prong 4 that lies within the subdivision boundaries shall be maintained (dipped) by and at the expense of the subdivision developer during construction of private streets and restored to the original design bottom grades and side slopes.

All storm drainage piping installed within the tax ditch shall become the maintenance responsibility of the developer and/or the HOA.

From time to time, the tax ditch may be maintained by DNREC using DNREC manpower and equipment. Any maintenance (dipping) spoils shall be placed on and within the tax ditch maintenance easement. The developer and/or the HOA may remove the spoils if they so choose at their expense.

Proposed subdivision lot boundaries may encroach into the tax ditch easements but not further than the building setback restriction lines as required by the Sussex County Zoning Ordinance. No street trees along private subdivision streets may be placed within the tax ditch maintenance easements.

No forested buffer plantings may be placed within the tax ditch maintenance easements any closer than 25' to the tax ditch top of bank on the 40' easement side and 16.5' to the tax ditch top of bank on the opposite side.

WILLIAMS CANAL PRONG 5

Existing 16.5' (from top of bank) maintenance easement to be undisturbed and no planned encroachment into the maintenance easement with any forested and/or landscape buffer strip. The required cluster development forested buffer area is thirty (30) feet wide minimum abutting an agricultural area.

The forested buffer strip conditions and specifications shall meet the Sussex County Subdivision Ordinance 99 definition (see attached).

That portion of Prong 5 that lies within the subdivision boundaries shall be maintained (dipped) by and at the expense of the subdivision developer during construction of private streets and restored to the original design bottom grades and side slopes.

WILLIAMS CANAL PRONG 6

Prong 6 generally lies in the center of the proposed subdivision and begins/ends at the Williams Canal Main and extends in a northerly direction and into the neighboring woodland tract owned now or formerly by McCabe Properties, LLC.

As illustrated on the Willow Run Preliminary Site Plan, Prong 6 and the associated maintenance easements will pass through a proposed +/- two (2) acre storm water management pond.

Maintenance access to the adjoining property (McCabe) must be allowed to remain.

We propose to reduce the existing eighty (80) foot wide maintenance easement to forty (40) feet in width for that portion of Prong 6 that lies within the Willow Run site boundaries. No reduction of the 16.5' (from top of bank) maintenance easement is proposed.

A twenty (20) foot maintenance easement shall be created around the entire storm water management pond and shown on the record subdivision plat. The pond perimeter maintenance easement shall connect to the parallel tax ditch maintenance easements to allow for a continuous maintenance access through the subdivision and to the neighboring property(s).

That portion of Prong 6 that lies within the subdivision boundaries shall be maintained (dipped) by and at the expense of the subdivision developer during construction of private streets and restored to the original design bottom grades and side slopes.

All storm drainage piping installed within the tax ditch shall become the maintenance responsibility of the developer and/or the HOA.

From time to time, the tax ditch may be maintained by DNREC using DNREC manpower and equipment. Any maintenance (dipping) spoils shall be placed on and within the tax ditch maintenance easement. The developer and/or the HOA may remove the spoils if they so choose at their expense.

Proposed subdivision lot boundaries may encroach into the tax ditch easements but not further than the building setback restriction lines as required by the Sussex County Zoning Ordinance. No street trees along private subdivision streets may be placed within the tax ditch maintenance easements.

No forested buffer plantings may be placed within the tax ditch maintenance easements any closer than 25' to the tax ditch top of bank on the 40' easement side and 16.5' to the tax ditch top of bank on the opposite side.

WILLIAMS CANAL PRONG 7

Existing 16.5' (from top of bank) maintenance easement to be undisturbed and no planned encroachment into the maintenance easement with any forested and/or landscape buffer strip.

The required cluster development forested buffer area is thirty (30) feet wide minimum abutting an agricultural area.

The forested buffer strip conditions and specifications shall meet the Sussex County Subdivision Ordinance 99 definition (see attached).

That portion of Prong 7 that lies within the subdivision boundaries shall be maintained (dipped) by and at the expense of the subdivision developer during construction of private streets and restored to the original design bottom grades and side slopes.

WILLIAMS CANAL PRONG 8

Existing 16.5' (from top of bank) maintenance easement to be undisturbed and no planned encroachment into the maintenance easement with any forested and/or landscape buffer strip. The required cluster development forested buffer area is thirty (30) feet wide minimum abutting an agricultural area.

The forested buffer strip conditions and specifications shall meet the Sussex County Subdivision Ordinance 99 definition (see attached).

That portion of Prong 8 that lies within the subdivision boundaries shall be maintained (dipped) by and at the expense of the subdivision developer during construction of private streets and restored to the original design bottom grades and side slopes.

WILLIAMS CANAL MAIN

Existing 16.5' (from top of bank) maintenance easement to be undisturbed and no planned encroachment into the maintenance easement with any forested and/or landscape buffer strip. The required cluster development forested buffer area is thirty (30) feet wide minimum abutting an agricultural neighboring land use.

The 30' forested buffer may encroach into the 40' maintenance easement a maximum of fifteen (15) feet. More specifically, at least 25' of the 40' maintenance buffer measured from the tax ditch top of bank must remain clear of all trees associated with the forested buffer to allow DNREC mowing equipment and dipping equipment to operate.

The forested buffer strip conditions and specifications shall meet the Sussex County Subdivision Ordinance 99 definition (see attached).

That portion of Williams Canal Main that lies within the subdivision boundaries shall be maintained (dipped) by and at the expense of the subdivision developer during construction of private streets and restored to the original design bottom grades and side slopes.

All storm drainage piping installed within the tax ditch shall become the maintenance responsibility of the developer and/or the HOA.

From time to time, the tax ditch may be maintained by DNREC using DNREC manpower and equipment. Any maintenance (dipping) spoils shall be placed on and within the tax ditch maintenance easement. The developer and/or the HOA may remove the spoils if they so choose at their expense.

Proposed subdivision lot boundaries may encroach into the tax ditch easements but not further than the building setback restriction lines as required by the Sussex County Zoning Ordinance. No street trees along private subdivision streets may be placed within the tax ditch maintenance easements.

No forested buffer plantings may be placed within the tax ditch maintenance easements any closer than 25' to the tax ditch top of bank on the 40' easement side and 16.5' to the tax ditch top of bank on the opposite side.

FORESTED AND/OR LANDSCAPED BUFFER STRIP

A strip of land, not less than 20 feet in width, exclusive of any residential lots, stormwater management areas or facilities, open space (except that the land area within the buffer strip may be included in the overall calculation of open space), recreational amenities, wastewater treatment and/or disposal facilities, water treatment facilities, streets, buildings or other surface improvements and located along the entire outer perimeter of any portion of a major subdivision of lands into four or more lots adjacent to land of other ownership. A landscape plan for the buffer shall be designed and certified to by a licensed landscape architect, licensed forester or forester designated by the Society of American Foresters as a "certified forester." The landscape plan shall be reviewed and commented on by the State Forester and shall be subject to the final review and approval of the Commission. The following conditions shall apply to the forested buffer:

[Amended 7-29-2008 by Ord. No. 1984]

- A. All trees that are to be planted shall include a mix of 70% deciduous shade trees and 30% evergreen trees, a majority of which shall be suitable trees of common local species, which may include existing as well as planted trees. Every one-hundred-foot length of buffer shall include a minimum total of 15 trees.
- B. All deciduous trees that are planted to establish the buffer plantings shall have a minimum caliper of 1.5 inches and a minimum height of six feet above ground when planted in order to insure that the trees will be capable of obtaining a minimum height of 10 feet above ground within five years of being planted.
- C. All evergreen trees that are planted to establish the buffer plantings shall have a minimum height of five feet above ground when planted in order to insure that they are reasonably capable of attaining a minimum height of 10 feet above ground within five years of being planted.
- D. The landscape plan may include suitable existing deciduous and evergreen trees of common local species, provided they will achieve the overall goal of the plan as described in Subsection E hereof and provided that said existing trees survive the site work construction activity and any changes in the water table and exposure which may result from the construction activity occurring prior to the date the buffer plantings are required to be installed as provided in Subsection F hereof.
- E. The goal of the landscape plan for the forested buffer area shall be to include trees of the type indicated herein that will be planted in a staggered natural manner, as opposed to being planted in row fashion, which will filter views from and into the subdivision in such a manner that the areas on the agricultural side of the buffer area appear more green and less visible and the structures or uses on the subdivision side appear less obvious and less dense than if no landscaping had been required. The procedures and details for planting new trees shall be specified by the landscape architect on the plan submitted to and approved by the Commission and shall include the requirement that the buffer area shall have a final grade that contains a minimum of four inches of topsoil and a suitable grass mix planted as sacrificial cover between the buffer trees for soil stabilization until the newly planted trees become larger. The plan may substitute woodchips for planted grass between the buffer trees in respect to both newly planted and existing trees, as determined by the landscape architect.
- F. The forested and/or landscape buffer shall be installed within 18 months from the date site work is authorized to commence, as documented by a notice to proceed letter from the Commission. For subdivisions that are approved to be constructed in phases, the buffer for each phase must be completed before County approvals or permits will be granted to construct the next phase.
- G. The land developer shall be held responsible for the health and survival of the trees, including regular necessary watering for a minimum of two years or until such later date as the maintenance responsibilities are transferred to a homeowners' association; provided, however, that the developer shall replace any trees that die during the minimum two-year developer maintenance prior to transferring maintenance responsibilities to a homeowners' association.

- H. The perpetual maintenance of the buffer plantings by a homeowners' association shall be assured through the restrictive covenants and/or homeowners' association documents. The perpetual maintenance plan shall include the requirement that any trees that die must be replanted with trees of the same type and species and in accordance with the original landscape plan approved by the County. The perpetual maintenance plan shall also include a requirement that the forested buffer area be planted and maintained according to best management practices in the forestry industry. The responsibility for the perpetual maintenance of the buffer strip and its plantings shall be assured through restrictive covenants which are obligatory upon the purchasers through assessments by the homeowners' association. The applicant and/or land developer must provide the Commission with satisfactory proof that the covenants include a perpetual maintenance plan which shall be binding upon the applicant and/or developer during the minimum two-year period described in Subsection G above and thereafter by the homeowners' association. The Commission and its attorney shall review and approve the perpetual maintenance plan prior to the restrictive covenants being recorded and prior to granting final site plan approval.
- I. The twenty-foot forested and/or landscape buffer strip is not required to be installed in those portions of the subdivision perimeter which represent the width of a right-of-way connector road or street that DelDOT or the Commission required the applicant to install pursuant to § 99-17D and the width of a stormwater outfall shown on the final site plan to drain surface or stormwater outside the perimeter of the subdivision.
- J. The landscape plan shall avoid placing planted trees or allowing existing trees to remain in the areas adjacent to entrances into and exits from the development in such a manner as to restrict the view of motorists entering or exiting from the development or restricting site lines for motorists in such a manner as to create a potential safety hazard.
- K. Notwithstanding any other provisions of this chapter, the Planning and Zoning Commission shall be authorized, as part of the site plan review process, to grant final approval of a plan for the roadway frontage of a major subdivision which may include landscape and design features, such as fences, walls, berms, landscape plantings of shrubs, ornamental grasses and/or trees, multimodal paths required by DelDOT, open areas, or a combination of such features which is designed and certified to by a licensed landscape architect, licensed forester or forester designated by the Society of American Foresters as a "certified forester" and reviewed and commented upon by the State Forester, for the purpose of making the subdivision more attractive, more in keeping with the surrounding area and less visible from the roadway, provided said plan will not cause the landscape features contained in the plan to be placed in an area adjacent to the entrance in such a manner as to restrict the view of motorists entering or exiting from the subdivision or restricting the sight lines of motorists in such a manner as to create a potential safety or traffic hazard.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

**ENVIRONMENTAL
ASSESSMENT
&
PUBLIC EVALUATION
REPORT**

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

ENVIRONMENTAL ASSESSMENT & PUBLIC EVALUATION REPORT

BACKGROUND AND PROJECT DESCRIPTION

- The Good Will Farm site is a 56.61-acre assemblage of parcels (Sussex Tax Parcels: 134-18.00-55.00, 134-19.00-5.00 & 6.00). The subject land is located on the west side of Peppers Corner Road (Sussex Road 365) and Bayard Road (Sussex Road 84), opposite Central Avenue (Sussex Road 84). The subject land is currently zoned AR-1 (Agricultural Residential) and the application is for an AR-1 Cluster Subdivision seeking approval to develop 104 single-family detached home sites with a small pool and clubhouse, sidewalks, walking trails and a large centrally located lake.
- A single subdivision entrance is planned at the intersection of Peppers Corner Road, Bayard Road and Central Avenue. The site will be served with public sanitary sewer via a connection to the Sussex County regional wastewater transmission, treatment and disposal Unified District facilities.
- A professionally designed landscaped buffer ranging in width from 20'-30' will extend along the perimeter of the site except those areas where tax ditch maintenance rights of way do not allow tree plantings. The gateway to the community as planned will orient all residences for front facing architectural views only. A large pond water feature with an existing woodland backdrop is planned at the boulevard entrance to the property.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

STORMWATER & DRAINAGE DESIGN

- Stormwater management design for the Good Will Farm site will be done in accordance with Delaware's Sediment and Stormwater Regulations and approved by the Sussex Conservation District. A Stormwater Assessment Study has been prepared and a Pre-Application Meeting has been held at the Sussex Conservation District office. Four stormwater management facilities are envisioned for the site, including three 48-hour extended detention wet ponds and a submerged gravel wetland. The central pond will be incorporated into the tax ditch system and the other facilities will discharge to the tax ditches. Collection of stormwater is to be accomplished through roadside swales and drainage culverts.

COMMUNITY POTABLE AND FIRE PROTECTION WATER SUPPLY

- The Good Will Farm site lies within the Tidewater Utilities Water Company service area and a connection to that regional public water system is planned. The regional water system connection will provide potable water supply for residential domestic use and also supply the quantities and pressures required by the Delaware State Fire Marshals Fire Prevention Regulations for residential subdivisions with fire hydrants.

WASTEWATER TREATMENT AND DISPOSAL

- The Good Will Farm site as planned will connect to the Unified Sanitary Sewer District of the Sussex County regional wastewater transmission, treatment and disposal system. In comments received from the Sussex County Engineering Department (SCED)

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

dated October 24, 2018, the subject tract lies in both Tier 2 and Tier 4 areas of the sewer planning areas. The SCED report confirms the proposed project is within design assumptions for the Sussex County sewer system and sewer capacity is available for the project as proposed.

- The Good Will Farm site will become contiguous to the Sussex County Unified Sanitary Sewer District through the Meadows at Bayard Subdivision which abuts both Good Will Farm and the sewer district boundaries. A formal Annexation Request Letter executed by members of The Meadows at Bayard, LLC has been submitted to the Sussex County Engineering Department.

TRAFFIC ANALYSIS

- The Good Will Farm developer submitted a Service Level Evaluation Request (SLER) Form to the Sussex P&Z Office in connection with this application on August 13, 2018. The September 4, 2018 DelDOT response to the SLER recommended the developer pay an Area Wide Study Fee in lieu of doing a TIS with the caveat that paying the fee does not relieve the developer from having to make or participate in off-site improvements.
- On August 2018, DelDOT met with the developer and The Traffic Group (traffic engineers) to discuss the scope of a TIS. DelDOT issued a TIS scope of work on August 29, 2018.
- On August 30, 2018, The Traffic Group submitted traffic count data in conformance with the TIS scope provided by DelDOT. On September 12, 2018, DelDOT confirmed in writing that the traffic counts submitted were acceptable.
- On October 22, 2018, The Traffic Group submitted a Traffic Impact Study to DelDOT for review and comment.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

- As of this writing, DelDOT has not completed a formal response to the TIS or identified specific off-site improvements that will be required in connection with the issuance of a commercial entrance permit.
- All commercial subdivision entrance improvements as well as all off-site improvements within the public DelDOT right of way shall be constructed and inspected as directed and approved by DelDOT.
- An abbreviated set of TIS documents is contained within the Supplemental Data Book. A full and complete copy of the TIS is available upon request.

THREATENED AND ENDANGERED SPECIES

- Watershed Eco, LLC is currently conducting a Rare, Threatened and Endangered (RTE) Species Study. The fieldwork is complete and no RTE species or habitat was encountered. Since the site is mainly in row crop agriculture, it is not expected that the site would support and RTE species. The Federal database search portion of this study is on hold until the Government Shutdown concludes, but this is just a formality with no anticipated concerns.

WETLANDS

- The Good Will Farm site has been evaluated for the existence of regulated wetlands in early 2018 by Mr. James C. McCulley, IV with Watershed Eco, LLC, a qualified professional wetland scientist (# 000471). Mr. McCulley has characterized the site as consisting mainly of agricultural lands with man-made ditches and an area of woodlands to the north. Williams Canal tax ditch bisects the site and appears to be an altered stream, additional man-made ditches drain to the main ditch some of which are designated as Tax Ditch Prongs.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

- The conclusions reached in the full wetland delineation report by Watershed Eco (copy attached in the Supplemental Data Book) are that there are two (2) isolated wetland areas within the Good Will Farm site. Waters of the United States were identified to the ordinary high-water mark (OHWM) of the Main Branch of Williams Canal tax ditch and a portion of Prong 4 of that same tax ditch system.
- Approvals from involved State and Federal regulatory agencies will be needed for subdivision street ditch road crossings.
- No disturbance of isolated wetlands is proposed or planned within the Good Will Farm subdivision land use plan.

OPEN SPACE MANAGEMENT

- The Good Will Farm site will result in the creation of both active and passive open space areas within the subdivision boundaries.
- The passive open space areas are confined to the two existing isolated wetland pockets identified by Watershed Eco during the wetland delineation process and the proposed extensive perimeter landscape buffering system. Those existing wetlands that are currently wooded are in a stable condition extensively vegetated with native species throughout. The management of the existing passive open space areas will be to preserve native trees and shrubs in the current condition. No clearing, disturbance, or altering of vegetation shall be permitted except the removal of dead and dying trees which pose a threat to public safety of adjacent private property. The landscape buffer areas will be vegetated in conformance with a detailed plan prepared under the direction of a Delaware licensed landscape architect and approved by the Delaware State Forestry Department. The guidelines for preparation of the landscape buffer are found in the Sussex County Code. Maintenance of landscape buffer areas will be under the

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

direction of qualified arborists under contract to the Good Will Farm home owner's association.

- The balance of the open space in Good Will Farm will be used more actively by the residents and their guests. These active open space areas are adjoining storm water ponds and tax ditch systems which will require maintenance conforming to requirements of the DNREC Division of Watershed Stewardship. An Open Space Management Plan will be developed by a qualified professional that will outline the program for perpetual maintenance. The perpetual maintenance will be accomplished by qualified individuals and firms specializing in this field and under contract to the Good Will Farm home owner's association. The Good Will Farm restrictive covenants will require the homeowners to engage a qualified professional to implement the Open Space Management Plan.

PUBLIC AND PRIVATE INFRASTRUCTURE

- The Good Will Farm subdivision will be served by both public water from Tidewater Utilities Water Company and public sanitary sewer from Sussex County.
- The Good Will Farm site as planned will connect to the Unified Sanitary Sewer District of the Sussex County regional wastewater transmission, treatment and disposal system. In comments received from the Sussex County Engineering Department (SCED) dated October 24, 2018, the subject tract lies in both Tier 2 and Tier 4 of the sewer planning areas. The SCED report confirms the proposed project is within design assumptions for the Sussex County sewer system and sewer capacity is available for the project as proposed.
- The Good Will Farm site will become contiguous to the Sussex County Unified Sanitary Sewer District through the Meadows at Bayard Subdivision which abuts both Good Will Farm and the

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

sewer district boundaries. A formal Annexation Request Letter executed by members of The Meadows at Bayard, LLC is included within this Supplemental Data Book.

- The sanitary sewer infrastructure will include a pump station with a direct connection to existing Sussex County force main transmission piping and a complete gravity collection system to serve each new residence. All pumping station components and gravity piping and appurtenances will be installed at the expense of the developer following Sussex County Ordinance 38 and other utility standards and operating agreements, inspected by Sussex County staff and dedicated to Sussex County upon acceptance of in-place construction.
- The Good Will Farm site lies within the Tidewater Utilities Water Company service area and a connection to that regional public water system is planned. The regional water system connection will provide potable water supply for residential domestic use as well as supply the quantities and pressures required by the Delaware State Fire Marshals Fire Prevention Regulations for residential subdivisions with fire hydrants.
- Other utilities to be extended to the property include CATV, electric and telephone provided through private agreements with those utility companies.
- Site drainage and stormwater management systems will also be developed pursuant to County Code and DNREC regulations governing inspection of installations and facilities maintenance.

ECONOMIC, RECREATIONAL & OTHER BENEFITS

- Multiple economic benefits accrue to the local economy from salaries and purchase of materials during the construction of both site and building improvements. Additional benefits accrue from increased property taxes, permit fees, utility impact fees and the like.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

- As stated elsewhere in this report, there are both active and passive recreational opportunities designed into the Good Will Farm land use plan. For a subdivision of one hundred four (104) individual residences, there is a limited Home Owner's Association capability of sustaining expensive amenities. A modest sized swimming pool with bath house that has some room for a few pieces of fitness equipment is an adequate economic burden to maintain for a community of this size. This active recreation amenity together with the required professional maintenance of the extensive landscape buffer areas, interior walking trails and common area grass cutting, fertilizing and weed/pest control should be sustainable for a community of this size. A balanced amenity offering with manageable upkeep expense will insure that the fit and finish of Good Will Farm common areas remain in a good state of repair and appearance.

CONFORMANCE WITH COMPREHENSIVE PLAN

- The Good Will Farm subdivision site has been planned in accordance with the new updated 2018 Comprehensive Plan approved by Sussex County Council. While it is understood that the 2007 Comprehensive Plan is currently and legally still in effect pending State Planning Office certification of the 2018 Plan, it seems appropriate and necessary to embrace the most current land use planning initiatives put forth by Sussex County planners and elected officials for the design of Good Will Farm.
- The Future Land Use component of the 2018 Plan has established Growth Areas where the County has signaled future growth is expected. The entire Good Will Farm site is mapped as **Coastal Areas** on the 2045 Future Land Use Map. Coastal Areas are one of seven (7) Growth areas defined and described in the 2018 Plan. The 2018 plan seeks to encourage the County's most concentrated forms of new development to Growth Areas.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

The 2018 Plan recognizes that the Coastal Growth Area is in a region among the most desirable locations in Sussex County for new housing. Coastal Areas can accommodate development provided special environmental concerns are addressed and a range of housing types should be permitted including single family detached which Good Will Farm proposes. Coastal Areas development densities proposed in the 2018 Plan range from 2-12 homes per acre. Good Will Farm subdivision proposes less than 2 dwellings per acre. Cluster development is encouraged that results in the permanent preservation of a substantial percentage of the tract or area being developed. Good Will Farm subdivision as planned preserves in excess of fourth percent (40%) open space as that term is defined in the Sussex County Code. Good Will Farm land use planning involves Best Management Practices (BMP's) in storm water management design, preserves nearly half of the existing woodlands on site , and proposes extensive buffers for wildlife habitat and nutrient (nitrogen and phosphorous) management. The Good Will Farm subdivision will be connected to the Sussex County regional wastewater collection, transmission and treatment facilities and the Tidewater Utilities regional potable and fire protection water system.

HISTORICAL AND CULTURAL RESOURCES

- The Good Will Farm site was reviewed in November of 2018 by the State Historic Preservation Office as a part of the PLUS process. Their report stated that there are no known archeological sites or known National Register listed or eligible properties on the parcel.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

ACTIONS TO MITIGATE DETRIMENTAL IMPACTS

- The Good Will Farm subdivision plan is based upon the principals of sound land use planning and landscape architecture. Open space corridors are located to promote and encourage pedestrian access between homes in the neighborhood.
- Wooded and open space pathways into and through the community via the tax ditch system and landscaped perimeter buffers allow the linking of off-site natural areas for wildlife surrounding the site to remain connected. Perimeter landscaped buffers also provide important esthetics for views into the site from neighboring properties and from within the subdivision.
- Home sites are established in a design where all future residential construction will be viewed from off-site looking at the front and not rear of all proposed homes.
- The gateway to the community presents a lakefront setting overlooking a wooded backdrop with no homes proposed on the entrance side of the boulevard roadway.
- No isolated wetland impacts, crossings or other intrusions are planned in Good Will Farm.
- The use of a qualified professional site maintenance company by the home-owners association to manage plant and animal communities in both the native and more manicured areas of Good Will Farm will serve to mitigate the effects of development on this site. Plant pest management, fertilizer application management and invasive species plant management will all serve to mitigate the effects of a low-density land use in comparison to the existing agricultural land use.
- Using “state of the art” best management stormwater quality and quantity controls via bio-filters, and bio-retention structures with native plant species will insure that the impacts of land development are minimized in comparison to the existing agricultural land use.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

**SUBDIVISION
CONSIDERATIONS
(SUSSEX CODE CHAPTER 99-9)**

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

SUBDIVISION CONSIDERATIONS

CHAPTER 99-9 ORDINANCE 1152

INTEGRATION OF PROPOSED SUBDIVISION INTO EXISTING TERRAIN AND SURROUNDING LANDSCAPE

- The Good Will Farm site is bound on the north by a mature woodland forest of native species owned by multiple property owners that is not presently managed actively for silviculture (tree farm).
- The eastern boundary of the Good Will Farm site abuts multiple existing single-family homes on one-half acre and larger lots stripped from Bayard Road frontage or within the Meadows at Bayard subdivision. Also, to the east is a planned gateway to the Good Will Farm subdivision that will become the fourth leg of an existing three-way intersection. DelDOT off-site improvements required in connection with the Good Will Farm entrance permit approvals shall result in improved auto and bicycle vehicular traffic at the intersection of Central Avenue, Peppers Corner Road and Bayard Road. Additionally, to the east adjoining the Meadows at Bayard subdivision and Good Will Farm is an actively tilled 13-acre farmstead with a residence and outbuildings.
- To the south and abutting the Good Will Farm site are more single family detached residences situated on one-half acre and larger lots stripped from Bayard Road or within the Jahnigen Subdivision. The Jahnigen Subdivision and lands immediately to the south are zoned B-1 Neighborhood Business and house a number of local businesses such as Sun Marine Maintenance Company and others.
- The western boundary of Good Will Farm abuts active farmland except for an area of mature woodland in the northwest corner of the proposed subdivision.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

- The Good Will Farm site and agricultural fields to the west are bisected by the Williams Tax Ditch which have multiple contributing tax ditch prongs and private agricultural ditch networks draining to the Williams Ditch. The Williams Tax Ditch drains away from the Good Will Farm site in a southeasterly direction.
- Good Will Farm does not propose to alter or modify any of the tax ditch alignments serving the proposed subdivision site and adjoining properties. One Prong passing thru the central part of Good Will Farm will be interrupted with a large pond that will accept water from the north and allow water to pass thru the pond in a southerly direction into Williams Canal.
- Multiple tax ditch Court Order Changes are proposed for purposes of reducing the width of maintenance easements as they pass through Good Will Farm or along the perimeter of the site. All tax ditch easement modifications will require approval from DNREC.
- In conjunction with construction of subdivision street and drainage improvements, the Good Will Farm developer will be required to restore all tax ditching to the original design grades and cross sections. This ditch maintenance by the subdivision developer will serve to improve the flow of drainage from all neighboring properties thru Good Will Farm.
- Perimeter landscaped buffers along tax ditches and other boundaries will be professionally designed and installed as a part of the Good Will Farm subdivision construction process.
- Two Federal jurisdictional isolated forested wetland areas have been delineated on the Good Will Farm site. Both of these areas will be left in their natural condition and not be disturbed as a part of subdivision construction.
- An Open Space Management Plan prepared by a qualified professional shall outline a detailed strategy to maintain the native trees and shrubs within existing natural wetland areas and developer planted landscape buffer areas.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

- The Open Space Management Plan will be implemented by landscape maintenance professionals under contract to the Good Will Farm Home Owner's Association as required by the subdivision restrictive covenants.
- No lots within Good Will Farm have direct access onto the road frontage of any State maintained routes or public roads.
- While DelDOT recommended a second subdivision entrance onto and from Bayard Road at the southern end of the site, this application proposes no entrance at that location.
- The extension of public water and sanitary sewer into the Good Will Farm site will present an opportunity for some adjoining land owners to connect to these two public utilities and abandon on-site septic systems and wells.
- The Good Will Farm subdivision design results in an excess of 40 percent open space to be actively managed by professional maintenance companies under contract to the home-owners association.
- The low residential density planned for Good Will Farm will result in less than 2 dwellings per acre (1.84 du/acre) in keeping with the low-density character of the surrounding area.
- All streets, sidewalks, site grading and sanitary sewer system infrastructure will be designed, constructed and inspected for conformance to all Sussex County Engineering Department standards and specifications.
- All grading, drainage and storm water management facilities will be designed, constructed and inspected for conformance to Sussex Conservation District and DNREC standards and specifications.
- All water service infrastructure will be designed to Tidewater Utilities standards and specifications and inspected by the State Fire Marshal's Office for conformance to State Fire Prevention Regulations.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

MINIMAL USE OF WETLANDS AND FLOODPLAINS

- The Good Will Farm site has been evaluated for the existence of regulated wetlands in early 2018 by Mr. James C. McCulley, IV with Watershed Eco, LLC, a qualified professional wetland scientist (# 000471). Mr. McCulley has characterized the site as consisting mainly of agricultural lands with man-made ditches and an area of woodlands to the north. Williams Canal tax ditch bisects the site and appears to be an altered stream. Additional man-made ditches drain to the main Williams Canal ditch, some of which are designated as Tax Ditch Prongs.
- The conclusions reached in the full wetland delineation report by Watershed Eco (copy attached in the Supplemental Data Book) are that there are two (2) isolated wetland areas within the Good Will Farm site. Waters of the United States were identified to the ordinary high-water mark (OHWM) of the Main Branch of Williams Canal tax ditch and a portion of Prong 4 of that same tax ditch system.
- Approvals from involved State and Federal regulatory agencies will be needed for subdivision street ditch road crossings.
- No disturbance of isolated wetlands is proposed or planned within the entire Good Will Farm subdivision land use plan.

- The entire Good Will Farm site as mapped on Flood Insurance Rate Map (FIRM) Number 10005C0495K (Map Revised March 16, 2015) is in “Other Areas” Zone X. Zone X are areas determined to be outside the 0.2% annual chance of floodplain. A copy of the current FIRM is included within the Supplemental Data Book.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

PRESERVATION OF NATURAL AND HISTORIC FEATURES

- The Good Will Farm site was reviewed in November of 2018 by the State Historic Preservation Office as a part of the PLUS process. Their report stated that there are no known archeological sites or known National Register listed or eligible properties on the parcel.
- The Good Will Farm site will result in the creation of both active and passive open space areas within the subdivision boundaries.
- The passive open space areas are confined to (1) the two existing isolated wetland pockets identified by Watershed Eco during the wetland delineation process and (2) the proposed extensive perimeter landscape buffering system. Those existing wetlands that are currently wooded are in a stable condition and extensively vegetated with native species throughout. The management of the existing passive open space areas will be to preserve native trees and shrubs in the current condition. No clearing, disturbance, or altering of vegetation shall be permitted except the removal of dead and dying trees which pose a threat to the public safety of adjacent private property. The 20' and 30' new landscape buffer areas will be vegetated in conformance with a detailed plan prepared under the direction of a Delaware licensed landscape architect and approved by the Delaware State Forestry Department. The guidelines for preparation of the landscape buffer are found in the Sussex County Code. Maintenance of landscape buffer areas will follow the direction of qualified arborists under contract to the Good Will Farm home owner's association.
- The balance of the open space in Good Will Farm will be used more actively by the residents and their guests. These active open space areas are adjoining storm water ponds and tax ditch systems which will require maintenance conforming to requirements of the DNREC Division of Watershed Stewardship.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

- An Open Space Management Plan will be developed by a qualified professional that will outline the program for perpetual plant maintenance, fertilizer and pesticide applications. The open space maintenance will be accomplished by qualified individuals and firms specializing in this field and under contract to the Good Will Farm home owner's association. The Good Will Farm restrictive covenants will require the homeowners to engage a qualified professional to implement the Open Space Management Plan.

PRESERVATION OF OPEN SPACE AND SCENIC VIEWS

- The Good Will Farm site will result in the creation of both active and passive open space areas within the subdivision boundaries.
- The passive open space areas are confined to the two existing isolated wetland pockets identified by Watershed Eco during the wetland delineation process and the proposed extensive perimeter landscape buffering system. Those existing wetlands that are currently wooded are in a stable condition and extensively vegetated with native species throughout. The management of the existing passive open space areas will be to preserve native trees and shrubs in the current condition. No clearing, disturbance, or altering of vegetation shall be permitted except the removal of dead and dying trees which pose a threat to public safety of adjacent private property. Landscape buffer areas will be vegetated in conformance with a detailed plan prepared under the direction of a Delaware licensed landscape architect and approved by the Delaware State Forestry Department. The guidelines for preparation of the landscape buffer are found in the Sussex County Code. Maintenance of landscape buffer areas will be under the direction of qualified arborists and maintenance professionals under contract to the Good Will Farm home owner's association.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

- The balance of the open space in Good Will Farm will be used more actively by the residents and their guests. These active open space areas are adjoining storm water ponds and tax ditch systems which will require maintenance conforming to requirements of the DNREC Division of Watershed Stewardship. An Open Space Management Plan will be developed by a qualified professional that will outline the program for perpetual maintenance and address pesticides and fertilizer application rates as well as frequency schedules. The perpetual maintenance will be accomplished by qualified individuals and firms specializing in this field and under contract to the Good Will Farm home owner's association. The Good Will Farm restrictive covenants will require the homeowners to engage a qualified professional to implement the Open Space Management Plan.

MINIMIZATION OF TREE, VEGETATION, AND SOIL REMOVAL AND GRADE CHANGES

- The Good Will Farm site will result in the creation of both active and passive open space areas within the subdivision boundaries.
- The passive open space areas are confined to the two existing isolated wetland pockets identified by Watershed Eco during the wetland delineation process and the proposed extensive perimeter landscape buffering system. Those existing wetlands that are currently wooded are in a stable condition extensively vegetated with native species throughout. The management of the existing passive open space areas will be to preserve native trees and shrubs in the current condition. No clearing, disturbance, or altering of vegetation shall be permitted except the removal of dead and dying trees which pose a threat to public safety of adjacent private property.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

- The Good Will Farm site is largely open and not forested except for those areas along the perimeter to the north and areas identified as isolated wetlands. To the maximum extent possible, the existing upland forested areas of the site are preserved as buffers to neighboring properties and for views from off-site into the new subdivision.
- The existing woodland area of the pre-developed site is 10.2 acres. After development, 4.6 acres of that woodland will remain.
- The subdivision site grading and drainage design follows the general contour of the existing pre-developed site except areas that are proposed for excavation as wet ponds and open swales to convey stormwater across the site.
- To the maximum extent possible, site top soils will be stockpiled for re-use in lot areas around new residences and active open space areas and for the creation of earth berms.

SCREENING OF OBJECTIONABLE FEATURES FROM NEIGHBORING PROPERTIES AND ROADWAYS

- The site perimeter landscape buffer areas will be vegetated in conformance with a detailed plan prepared under the direction of a Delaware licensed landscape architect and approved by the Delaware State Forestry Department. The guidelines for preparation of the landscape buffer are found in the Sussex County Code. Maintenance of landscape buffer areas will be under the direction of qualified arborists under contract to the Good Will Farm home owner's association.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

PROVISION FOR WATER SUPPLY

- The Good Will Farm site lies within the Tidewater Utilities Water Company service area and a connection to that regional public water system is planned.
- The regional water system connection will provide potable water supply for residential domestic use as well as supply the quantities and pressures required by the Delaware State Fire Marshals Fire Prevention Regulations for residential subdivisions with fire hydrants.

PROVISION FOR SEWAGE DISPOSAL

- The Good Will Farm site as planned will connect to the Unified Sanitary Sewer District of the Sussex County regional wastewater transmission, treatment and disposal system. In comments received from the Sussex County Engineering Department (SCED) dated October 24, 2018, the subject tract lies in both Tier 2 and Tier 4 areas of the sewer planning areas. The SCED report confirms the proposed project is within design assumptions for the Sussex County sewer system and sewer capacity is available for the project as proposed.
- The Good Will Farm site will become contiguous to the Sussex County Unified Sanitary Sewer District through the Meadows at Bayard Subdivision which abuts both Good Will Farm and the sewer district boundaries. A formal Annexation Request Letter executed by members of The Meadows at Bayard, LLC is included within this Supplemental Data Book.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

PREVENTION OF POLLUTION OF SURFACE AND GROUNDWATER

- The storm water management design at Good Will Farm will utilize a system of wet ponds, bio-filters, and grassed waterways for the management of post development runoff volumes to address State of Delaware mandated water quality standards. Ultimately, all storm water runoff from Good Will Farm will find its way into existing ditch systems and tributaries of the Williams Tax Ditch. As required by law, all drainage and storm water management design documents and computations will be scrutinized by the Sussex Conservation District prior to issuance of any permits for land disturbing activities. The quality of storm water discharges from the designed residential development will be improved above and beyond that which is currently being discharged from the existing agricultural operation.

MINIMIZATION OF EROSION AND SEDIMENTATION, CHANGES IN GROUNDWATER LEVELS, OF INCREASED RATES OF RUNOFF, OF POTENTIAL FOR FLOODING AND DESIGN OF DRAINAGE SO THAT GROUNDWATER RECHARGE IS MAXIMIZED

- The storm water management design at Good Will Farm will utilize a system of wet ponds, bio-filters, and grassed waterways for the management of post development runoff volumes to address State of Delaware mandated water quality standards. Ultimately, all storm water runoff from Good Will Farm will find its way into existing ditch systems and tributaries of the Williams Tax Ditch. As required by law, all drainage and storm water management design documents and computations will be scrutinized by the Sussex Conservation District prior to issuance of any permits for land disturbing activities. Storm water discharges

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

from the designed residential development will be improved above and beyond that which is currently being discharged from the existing agricultural operation.

PROVISION FOR SAFE VEHICULAR AND PEDESTRIAN MOVEMENT WITHIN THE SITE AND TO ADJACENT WAYS

- The Good Will Farm site is required by the Delaware Department of Transportation (DelDOT) to undertake a Traffic Impact Study (TIS) and assess the need for any off-site improvements to public roads. The recommendations for off-site improvements by DelDOT staff in response to the TIS report findings and DelDOT regulations will become necessary as a part of the commercial subdivision entrance permit process.
- The commercial subdivision entrance permit will insure, to DelDOT standards, that safe auto and bicycle vehicular and pedestrian movements will occur as a part of this new subdivision construction.
- The Good Will Farm subdivision design incorporates a continuous paved sidewalk network throughout the neighborhood connecting residents to each other and to site amenities including walking trails.

EFFECT ON AREA PROPERTY VALUES

- The Good Will Farm subdivision plan is based upon the principals of sound land use planning and landscape architecture.
- Open space corridors are located to promote and encourage pedestrian access between homes in the neighborhood and to connect to public pedestrian and bicycle systems.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

- Wooded and open space pathways into and through the community via the tax ditch system and landscaped perimeter buffers allow the linking of off-site natural areas surrounding the site to remain connected. Perimeter landscaped buffers also provide important esthetics for views toward the site from neighboring properties and from within the subdivision.
- Home sites are configured by design resulting in future residential construction being viewed from off-site looking at the front and not rear of all proposed residences.
- The gateway to the community presents a lakefront setting overlooking a wooded backdrop with no homes proposed on the entrance side of the boulevard roadway.
- For the above reasons, this new well-planned community will command an above market home sale price and re-sale price which will serve as a positive effect on those properties in the immediate neighborhood.

PRESERVATION AND CONSERVATION OF FARMLAND

- The Good Will Farm site will not neither preserve or conserve farmland.

EFFECT ON SCHOOLS, PUBLIC BUILDINGS AND COMMUNITY FACILITIES

- The Good Will Farm site with new single family detached homes is likely to attract retiree and/or second home buyers as residents. The relatively small (104 homes) size of Good Will Farm and the projected demographic of the buyers would limit the impacts of future residents upon existing schools.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

- During the commercial entrance permit process with DelDOT, the applicant will be required to coordinate this new development with the DART transportation staff to learn if a public service bus stop is appropriate and required at this location.
- The residents in this new neighborhood would be welcomed by local merchants, restaurants and faith-based organizations to contribute to the overall wellbeing of the community.

EFFECT ON AREA ROADWAYS AND PUBLIC TRANSPORTATION

- The Good Will Farm developer submitted a Service Level Evaluation Request (SLER) Form to the Sussex P&Z Office in connection with this application on August 13, 2018. The September 4, 2018 DelDOT response to the SLER recommended the developer pay an Area Wide Study Fee in lieu of doing a TIS with the caveat that paying the fee does not relieve the developer from having to make or participate in off-site improvements.
- On August 2018, DelDOT met with the developer and The Traffic Group (traffic engineers) to discuss the scope of a TIS. DelDOT issued a TIS scope of work on August 29, 2018.
- On August 30, 2018, The Traffic Group submitted traffic count data in conformance with the TIS scope provided by DelDOT. On September 12, 2018, DelDOT confirmed in writing that the traffic counts submitted were acceptable.
- On October 22, 2018, The Traffic Group submitted a Traffic Impact Study to DelDOT for review and comment.
- As of this writing, DelDOT has not completed a formal response to the TIS or identified specific off-site improvements that will be required in connection with the issuance of a commercial entrance permit.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

- All commercial subdivision entrance improvements as well as all off-site improvements within the public DelDOT right of way shall be constructed and inspected as directed and approved by DelDOT.
- An abbreviated set of TIS documents is contained within the Supplemental Data Book. A full and complete copy of the TIS is available upon request.

COMPATABILITY WITH OTHER AREA LAND USES

- The low residential density planned for Good Will Farm will result in less than 2 dwellings per acre (1.84 du/acre) in keeping with the low-density character of the immediate surrounding area.
- Growth in the form of new residential subdivision communities have been progressing south from Ocean View and Millville in the recent past. Directly across from Good Will Farm on Bayard Road is the Woodlands subdivision. Abutting Woodlands is The Estuary community to the northeast.

EFFECT ON AREA WATERWAYS

- All construction activities within the Good Will Farm site shall adhere to detailed plans and specifications prepared by Delaware licensed professional engineers contained within a Stormwater Management Plan with Sediments and Erosion Control provisions approved by the Sussex Conservation District. The Sussex Conservation District requires all site disturbances to be under inspection by DNREC staff to insure compliance with approved stormwater management designs and specifications. Therefore, the development of Good Will Farm will have taken the necessary precautions to assure there are no negative water quality or quantity effect on area tax ditch waterways.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

- An Open Space Management Plan prepared by a qualified professional under agreement with the Good Will Farm homeowner's association will monitor the applications of fertilizers and pesticide treatments within the community. Proper management of these fertilizer and pesticide applications may result in less water quality impact to tax ditch drainage systems than the pre-developed condition of active agriculture.

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

**TECHNICAL
ADVISORY
COMMITTEE
(TAC)
REPORT**

PLANNING & ZONING COMMISSION

ROBERT C. WHEATLEY, CHAIRMAN
KIM HOEY STEVENSON, VICE-CHAIRMAN
DOUGLAS B. HUDSON
R. KELLER HOPKINS
HOLLY J. WINGATE



Sussex County

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JANELLE CORNWELL, AICP
DIRECTOR

December 10, 2018

Mr. Stephen L. Marsh, P.E.
George, Miles & Buhr, LLC
206 West Main Street
Salisbury, MD 21801

By email to: smarsh@gmbnet.com

RE: Review of Preliminary Subdivision Plan for Good Will Farms (2018-24) (formerly known as "Willow Run") for the creation of one-hundred and four (104) single family lots is located south of Ocean View on Bayard Rd at the intersection of Peppers Corner Rd. and Central Ave.
Tax Parcels: 134-18.00-55.00, 134-19.00-5.00 & 6.00

Dear Mr. Marsh,

The Planning and Zoning Department has reviewed the Preliminary Subdivision Plan for the creation of one-hundred and four (104) single-family lots on a 56.41-acre parcel located south of Ocean View on Bayard Road at the intersection of Peppers Corner Road and Bayard Road (SCR 84). The project is located within the Agricultural Residential (AR-1) Zoning District and in a Low-Density Zone. The subdivision will contain amenities including a proposed pool, clubhouse and walking trail. Staff have reviewed the submitted plan for compliance with the Zoning and Subdivision Code and have the following comments:

Preliminary Subdivision Plan

1. Please show the proposed subdivision name "Good Will Farms" that was approved on September 28, 2018 per Sussex County's Mapping and Addressing Department. **AMENDED**
2. Please change the present zoning in the Zoning Data column from "AR" to "AR-1" for further specificity and clarity.
3. Please submit copies of all HOA documents, since there is to be a Homeowner's Association generated as indicated in the General Notes column. PLEASE SEE TAB 12 IN THE DESIGN SUMMARY AND SUPPLEMENTAL DATA BOOK DATED JANUARY 2, 2019
4. Please include the Legend on each sheet for additional clarity. Please ensure that all symbols used in the Legend are also used on the plat. **AMENDED**
5. Please include the acreage of the wetlands on the plan (§99-23(Q)). Please note that a fifty-foot buffer zone should be established landward from the ordinary high-water line of perennial non-tidal rivers and streams (§115-193(B)). **AMENDED THERE ARE NO NON-TIDAL WATER BODIES.**
6. Please annotate all land use for agricultural purposes within 300-ft of the proposed subdivision (§99-23(O)). Additionally, any new subdivision development located in whole or in part within



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2 THE CIRCLE | PO BOX 417
GEORGETOWN, DELAWARE 19947

- 50-ft of the boundary of land used primarily for agricultural purposes requires a 50-ft buffer (§99-6(G)(2)). **ANNOTATED AND 50' BUFFER ADDED**
7. Please ensure that the location map provided is at a scale of one-inch equals one mile (§99-23(B)). **AMENDED**
 8. Please include the North arrow on the top of the plat. The North point should always be on the top of the plat (§99-23(D)). **AMENDED**
 9. Please add the name and locations of adjacent subdivisions (§99-23(F)). **ADDED**
 10. Please include present zoning classifications of all surrounding/adjacent parcels and zoning district lines (§99-23(I)). **INCLUDED**
 11. Please include the width of all streets. A cross-section is required. (§99-23(J)). **INCLUDED**
 12. Please include the approximate dimensions and areas of all proposed lots or parcels to be included in the subdivision (§99-23(K)). **INCLUDED**
 13. Please show the location of all proposed utilities (§99-23(M)). **SHOWN**
 14. Please clearly label all lands used primarily for agricultural purposes within 300 feet of the boundary of the proposed subdivision (§99-23(O)). **LABELLED**
 15. Please include the location of all open space on the plan (§99-23(S)). **INCLUDED**
 16. Prior to approval of the Final Subdivision Site Plan, approval letters or “letters of no objection” from the following agencies shall be submitted to the Sussex County Planning and Zoning Department: **ACKNOWLEDGED**
 - a. Sussex Conservation District
 - b. Office of the State Fire Marshal
 - c. Delaware Department of Transportation
 - d. DNREC
 - e. Sussex County Department of Engineering
 - f. Sussex County Mapping and Addressing

This Department is in receipt of Technical Advisory Committee comments from the following advisors, copies of which are attached. **RESPONSES FOLLOW**

Please note that a lot fee of \$10 per lot is required to be paid prior to approval of any Final Subdivision Plan. For 104 lots, the fee is \$1,040.00. Please note that the Final Subdivision Plan, once approved, must be recorded in the Recorder of Deeds Office within a period of 60 days after the Final Site Plans have been approved. **ACKNOWLEDGED**

A Public Hearing is tentatively scheduled before Planning & Zoning Commission on **January 24, 2019**. Please provide **one (1)** full-size copies of any revisions to the Preliminary Subdivision Plan to the Planning and Zoning Office, **seven (7) copies (11" x 17")** by **January 14, 2019** for consideration at the Planning & Zoning Commission meeting on **January 24, 2019**. **ACKNOWLEDGED**

Please feel free to contact me with any questions during business hours 8:30am – 4:30pm Monday through Friday at 302-855-7878.

Sincerely,



Ms. Lauren DeVore
Planner III



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

JENNIFER COHAN
SECRETARY

July 26, 2018

Ms. Constance C. Holland
Office of State Planning Coordination
122 Martin Luther King Jr. Blvd., South
Haslet Armory, Suite 302
Dover, DE 19901

Dear Ms. Holland:

This letter is to provide comments on eight of the nine applications that were discussed at the July meeting of the Preliminary Land Use Service (PLUS). Comments on the applications are enclosed. Comments on the Town of Clayton's 2018 Comprehensive Plan (PLUS 2018-07-01) will be sent separately. Descriptions of the applications follow.

Dover Mall: Power Center (PLUS 2018-07-02)

Western Development Corp. seek to develop 578,500 square feet of new commercial buildings and 18,000 square feet of building additions on an 88.42-acre assemblage of parcels (Tax Parcel Nos. ED-05-057.00-01-14.04 and 14.05). The assemblage is located on the east side of the Dover Mall. Most of the new construction would be located just outside the Mall ring road and would be served initially by that road and later also by a proposed collector-distributor road and service road parallel to Delaware Route 1. The one exception in the new construction is a 5,500 square foot pad site along US Route 13, to be built in conjunction with a realignment on the Mall's north driveway. The building additions are proposed at the Mall's northeast entrance near the existing food court. The land is zoned SC-3 and no rezoning would be needed to permit this use.

Cannon Property (PLUS 2018-07-03)

CMF Companies seeks to develop 70 single-family detached houses on a 120.77-acre assemblage of parcels (Tax Parcel Nos. 533-20.00-20.00, 21.00 and 22.00 and 533-20.19-97.00). The assemblage is located on the northwest corner of Lighthouse Road (Delaware Route 54) and Bennett Avenue near Fenwick Island. The land is zoned AR-1 and would be developed with the Cluster option; no rezoning would be needed to permit this use. DeDOT knows this development as the residential component of a mixed-use development that also includes a 6,600 square foot Quality restaurant and a 3,300 square foot high-turnover sit-down restaurant.

Peninsula Square (PLUS 2018-07-04)

Limitless Development, LLC seeks to develop apartments and commercial uses on a 30-acre parcel (Tax Parcel No. 234-23.00-115.00). The parcel is located on the north (or west) side of Delaware Route 24 and the west (or south) side of Autumn Road (Sussex Road 299). The text of the application differs somewhat from the Concept Site Plan that accompanies it but from that plan, 144 apartments, a 100-room hotel, 40,000 square feet of retail space, a 6,200 square foot restaurant and a 15,000 square foot medical office building are proposed. The parcel is zoned CR-1 and no rezoning would be needed to allow the proposed use.

Indian River School District – Sussex Central High School (PLUS 2018-07-05)

Indian River School District seeks to convert the existing Sussex Central High School on the west side of Patriots Way (Sussex Road 318) to a middle school and to build a new high school immediately south thereof, on the northwest corner of Patriots Way and Avenue of Honor (Sussex Road 86). Both schools would be contained in Tax Parcel No. 133-11.00-105.00. The land is zoned AR-1 and no rezoning would be needed to permit this use.

Warrington Property (PLUS 2018-07-06)

Bunting Macks, LLC seeks to develop 99 single-family detached houses on a 46-acre parcel (Tax Parcel No. 533-17.00-182.00). The parcel fronts on the southeast corner of Lighthouse Road (Delaware Route 54) and Hudson Road (Sussex Road 387) but the developer is keeping their frontage along Route 54 for use as a separate commercial development, with a relatively small part of the site frontage on Hudson Road being retained as access for the residential development now proposed. The land is zoned R-4 in the Town of Selbyville and no rezoning would be needed to permit this use.

Willow Run Subdivision (PLUS 2018-07-07)

Gulfstream Development, LLC seeks to develop 100 single-family detached houses on a 56-acre assemblage of parcels (Tax Parcel Nos. 134-18.00-55.00 and 134-19.00-5.00 and 6.00). The assemblage fronts on the east side of Bayard Road and Peppers Corner Road (both Sussex Road 365) with access opposite Central Avenue (Sussex Road 84). The land is zoned AR-1 and would be developed with the Cluster option; no rezoning would be needed to permit this use.

Agency Name: Dept. of Transportation Project Name: Willow Run
Division: Planning Contact Person: Bill Brockenbrough

Regulations/Code Requirements

- The site access at the intersection of Bayard Road (Sussex Road 84), Central Avenue (also Sussex Road 84) and Peppers Corner Road (Sussex Road 365) 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>. **ACKNOWLEDGED**
- Pursuant to Section P.3 of the Manual, a Pre-Submittal Meeting is required before plans are submitted for review. **ACKNOWLEDGED**
- 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. **ACKNOWLEDGED**
- Per Section 2.2.2.1 of the Development Coordination 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. The PLUS application states that the proposed development would generate 1,040 vehicle trip ends per day. DelDOT confirms that number and calculates that the development would generate 102 vehicle trip ends per hour during the evening peak hour on the adjacent roads. Therefore a TIS is warranted. **TIS HAS BEEN PREPARED AND SUBMITTED**

Per Section 2.2.2.2 of the Manual, developments generating fewer than 2,000 vehicle trip ends per day and fewer than 200 vehicle trip ends per hour in any hour of the day may be eligible to pay a fee, the Area Wide Study Fee, in lieu of doing a TIS. The fee is calculated as \$10 times the Average Daily Traffic volume shown on the site plan and is payable with the Initial Stage submission. Payment of the fee does not exempt the developer from responsibility to make off-site improvements or from preparing a Traffic Operational Analysis (TOA) if DelDOT identifies a need for a TOA in the plan review process. **A TIS HAS BEEN PREPARED AND SUBMITTED**

DelDOT will require a TOA for this development to examine the need for improvements at the site entrance. DelDOT presently anticipates requiring a minor realignment of Central Avenue to create a right-angle intersection. The appropriate configuration of the intersection and the traffic control needed there will be the subject of the TOA. **AGREED**

- Section 3.2.4.2 of the Manual addresses the placement of right-of-way monuments (markers) along the roads on which a property fronts, in this case Bayard Road and Peppers Corner Road. Monuments sufficient to re-establish the permanent rights-of-way after the dedication discussed below should be shown on the plan and provided in the field in accordance with this section. **ACKNOWLEDGED**

- 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 Bayard Road and Peppers Corner Road to meet DelDOT's standards for collector roads and local roads, respectively. By this regulation, this dedication is to provide a minimum of 40 feet of right-of-way from the physical centerline along Bayard Road and 30 feet of right-of-way from the physical centerline along Peppers Corner Road. 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.**" **ACKNOWLEDGED**
- In accordance with Section 3.2.5.1.1 of the Manual, if this development is proposing a neighborhood sign/structure, then a permanent easement shall be established at the site 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. **ACKNOWLEDGED**
- In accordance with Section 3.2.5.1.2 of the Manual, DelDOT will require the establishment of 15-foot wide permanent easements across the property frontage on both Bayard Road and Peppers Corner Road. The location of the easements 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.**" **ACKNOWLEDGED**
- In accordance with Section 3.4 of the Manual, 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 available on the DelDOT website at <https://www.deldot.gov/Business/subdivisions/pdfs/Critical-Items-Record-Subdivision.pdf?09222017>. **ACKNOWLEDGED**
- Referring to Section 3.4.2.1 of the Manual, the following items, among other things, are required on the Record Plan:
 - A Traffic Generation Diagram. See Figure 3.4.2-a for the required format and content.
 - Depiction of all existing entrances within 450 feet of the proposed entrance on Bayard Road and within 600 feet of the proposed entrance on Peppers Corner Road.
 - Notes identifying the type of any off-site improvements, agreements (signal, letter) contributions and when the off-site improvements are warranted.**ACKNOWLEDGED**
- 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. Private or municipal streets should follow the County's requirements for connectivity. **ACKNOWLEDGED**

- Section 3.5.4.2 of the Manual addresses requirements for shared-use paths and sidewalks. Referring to Section 3.5.4.2.A of the Manual, in Level 3 and 4 Investment Areas, installation of a sidewalk or Shared Use Path along the development's road frontage is at the discretion of DelDOT's Subdivision Engineer. Because there is significant development activity along Central Avenue, DelDOT will require a Shared Use Path along the development frontage on both Bayard Road and Peppers Corner Road and anticipates requiring crosswalks at the site entrance intersection. **ACKNOWLEDGED**
- 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. **ACKNOWLEDGED**
- Section 3.5.4.4 of the Manual addresses access-ways, which are similar to Shared Use Paths (SUP) but are used to connect from an SUP or sidewalk along a road to an interior trail or subdivision street when the spacing between streets is inadequate to accommodate convenient pedestrian and bicycle travel. DelDOT anticipates requiring an access-way from the south site frontage on Bayard Road to the cul de sac proposed near it. **ACKNOWLEDGED**
- 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 Bayard Road and Peppers Corner Road. **ACKNOWLEDGED**
- Referring to Section 4.3 of the Manual, an entrance plan shall be prepared prior to issuing entrance approval. The entrance plan submittal shall include the items listed on the Critical Items for Acceptance: Entrance/Construction/Subdivision Set Plan document available on the DelDOT website at https://www.deldot.gov/Business/subdivisions/pdfs/Critical-Items_Entrance_Construction_Subdivision.pdf?09222017. **ACKNOWLEDGED**
- In accordance with Section 5.2.5.6 of the Manual, a separate turning template plan shall be provided to verify vehicles can safely enter and exit the site entrance. As per Section 5.2.3 of the Manual, the entrance shall be designed for the largest vehicle using the entrance. **ACKNOWLEDGED**
- 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>. **ACKNOWLEDGED**
- In accordance with Section 5.4 of the Manual, sight distance triangles are required and shall be established in accordance with American Association of State Highway and Transportation Officials (AASHTO) standards. A spreadsheet has been developed to

assist with this task. It can be found at <http://www.deldot.gov/Business/subdivisions/index.shtml>. **ACKNOWLEDGED**

- 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. **ACKNOWLEDGED**
- Because the proposed development would not have State-maintained streets, Section 6.4.3 of the Manual, which pertains to the inspection and acceptance of commercial entrances, applies. Construction inspection responsibilities shall be in accordance with Figure 6.4.3-a. DelDOT's preliminary reading of this figure is that the project requires Level I inspection and that a construction inspection agreement will not be needed.
- Section 7.7.2 of the Manual addresses the need to provide 20-foot wide drainage easements for all storm drainage systems, open or closed, that fall outside the existing right-of-way or the drainage/utility easement. In accordance with this section, metes and bounds and total areas need to be shown for any drainage easements. The easements should be shown and noted on the record plan. **ACKNOWLEDGED**

Suggestions

- Section 1.2.1 of the Manual addresses where entrances should be located. DelDOT recommends but does not require that the applicant provide an access point on Bayard Road at their south frontage on that road. **ACKNOWLEDGED**
- Section 3.2.4.1 of the Manual addresses the placement of right-of-way monuments (markers) along subdivision streets. DelDOT recommends that monuments be furnished and placed along the proposed streets in accordance with this section. **ACKNOWLEDGED**
- The applicant should expect a requirement that any substation and/or wastewater facilities will be required to have access from an internal street or driveway with no direct access to Bayard Road or Peppers Corner Road. **ACKNOWLEDGED**
- The applicant should expect a requirement that all PLUS and Technical Advisory Committee (TAC) comments be addressed prior to submitting plans for review. **YES**
- Please be advised that the Standard General Notes were updated on December 8, 2017, and posted to the DelDOT website. The notes can be found at <http://www.deldot.gov/Business/subdivisions/index.shtml>. **ACKNOWLEDGED**

Agency Name: DNREC

Project Name: 2018-24 Willow Run

Date: 9/27/2018

Division: Waste and Hazardous Substances/ SIRS
Meghan.Crystall@state.de.us (302)-395-2600

Contact Person: Meghan Crystall

Regulations/Code Requirements

DNREC's Site Investigation and Restoration Section (SIRS) has reviewed the proposed project.

- If it is determined by the Department that there was a release of a hazardous substance on the property in question and the Department requires remediation pursuant to the Hazardous Substance Cleanup Act, the provisions of 7 Del.C. Chapter 91, Delaware Hazardous Substance Cleanup Act and the Delaware Regulations Governing Hazardous Substance Cleanup shall be followed.”
- Only one Site Investigation & Restoration Section (SIRS) site was found within a half mile radius of the proposed development. The proposed property, 2018-24 Willow Run, is located **within a ½ mile radius of** a SIRS Site known as the Peninsula Oil Site (DE-1196). The Site was brought to the attention of the Department in March of 2000, because of complaints from local residence about a diesel smell coming from large soil piles staged behind the holding tanks. It was discovered that the soil came from another Tanks Management Section (TMS) petroleum spill site. The soil piles were removed in April 2000. A follow-up site visit was conducted by TMS and SIRS along with Public Health to collect water samples from 15 residential homes. Analytical results of all 15 homes were 'non-detect'. The Site is being handled by the Tanks Management Section.

Suggestions

- SIRS strongly recommends that the land owner performs appropriate environmental due diligence as necessary of the property. **A PHASE 1 ESA WAS PERFORMED WITHIN THE LAST SIX MONTHS**
- Additional remediation may be required if the project property or site is re-zoned by the county or state. **ACKNOWLEDGED**
- Should a release or imminent threat of a release of hazardous substances be discovered during the course of development (e.g., contaminated water or soil), construction activities should be discontinued immediately and DNREC should be notified at the 24-hour emergency number (800-662-8802). SIRS should also be contacted as soon as possible at 302-395-2600 for further instructions. **ACKNOWLEDGED**

TO: **Christin Headley**
 Sussex County Planning and Zoning
 Sussex County Courthouse
 P. O. Box 417
 Georgetown, DE 19947

FROM: **John Martin**

DATE: **October 23, 2018**

SUBJECT: **TAC review comments**

Watershed: Inland Bays (Low Reduction zone)
Subdivision/Applicant: Willow Run (2018-24)
Tax Map#(s): 134.00-18.00-55.00 et al.
Proposed waste disposal type: Central Sewer??

Regulatory Requirements

- The project is located in the *low nutrient reduction* zone of the greater Inland Bays watershed. In this watershed, Total Maximum Daily Load (TMDL) pollutant reduction targets have been developed by the State of Delaware (under the auspices of Section 303(d) of the 1972 Federal Clean Water Act) for nutrients (e.g., nitrogen, phosphorus), and bacteria. A TMDL is the maximum level of pollution allowed for a given pollutant below which a “water quality limited waterbody” can assimilate and still meet State water quality standards (e.g., dissolved oxygen, nutrients, and bacteria; *State of Delaware Surface Water Quality Standards, as amended July 11, 2004*) to the extent necessary to support use goals such as, swimming, fishing, drinking water and shell fish harvesting. The TMDL for the *low reduction* zone of the Inland Bays watershed calls for 40 percent reduction in nitrogen and phosphorus from baseline conditions. The TMDL also calls for a 40 percent reduction (17 percent for marine waters) in bacteria from baseline conditions. Please view the following web link for further information on the regulatory requirements and technical analysis involved in the development of the specific TMDLs: <http://www.dnrec.delaware.gov/swc/wa/Pages/WatershedAssessmentTMDLs.aspx>
- The Inland Bays Pollution Control Strategy (PCS) and the accompanying regulations were finalized by order of the DNREC Secretary on October 2008. Following adoption of the PCS regulations, a legal challenge and appeal was mounted against DNREC on February 25, 2011 by Sussex County through the Delaware Superior Court; this appeal resulted in a court order declaring buffer components in the PCS as void and unenforceable (Section 4 and portions of Section 5). A subsequent appeal to the Delaware Supreme Court on December 2011 affirmed the Superior Court decision; however, the court decision did not invalidate or negate the remaining regulatory components, or the numerous voluntary components which still remain in effect. The PCS regulations can be reviewed at <http://regulations.delaware.gov/documents/November2008c.pdf>. Background information about the PCS with guidance documents and mapping tools can be retrieved from http://www.dnrec.state.de.us/water2000/Sections/Watershed/ws/ib_pcs.htm

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

ACKNOWLEDGED A NUTRIENT MANAGEMENT PLAN WILL BE DEVELOPED FOR GOOD WILL FARM SINCE THE OPEN SPACE AREAS EXCEED 10 ACRES.

Recommendations

Soils

- Based on soils survey mapping update (Figure 1), the primary soil mapping units of concern mapped in subject parcel are Hurlock (HuA) and Mullica (MuA). Fallsington and Mullica are poorly-drained and very poorly-drained wetland associated hydric soils, respectively. Hydric soils are considered unsuitable for development due to the presence of an elevated seasonal-high water table. Since most of the soils mapped in subject parcel are hydric (estimated 90%), most of this parcel is likely to be unsuitable for development.

THIS SITE HAS BEEN EXTENSIVELY DITCHED RESULTING IN SIGNIFICANTLY REDUCED SEASONAL HIGH WATER TABLES. THIS SITE WILL SUPPORT RESIDENTIAL DEVELOPMENT AND THE ASSOCIATED STREETS AND UTILITY INFRASTRUCTURE.

- We strongly discourage building on hydric soils because they are functionally important source of water storage (functions as a “natural sponge”); the loss of water storage through excavation, filling, or grading of intact native hydric soils increases the probability for more frequent and destructive flooding events. The probability for flooding is further compounded by increases in surface imperviousness as building density in the area increases over time. Moreover, destruction of hydric soils increases the amount pollutant runoff (i.e., hydric soils sequester and detoxify pollutants) which contributes to lower observed water quality in regional waterbodies and wetlands. We strongly recommend the applicant contact a licensed (Delaware Class D) soil scientist to make a site specific assessment (i.e., soil survey mapping) of the soils on this site. A list of licensed Class D soil scientists can be obtained at the following web link:

<http://www.dnrec.delaware.gov/wr/Information/GWDInfo/Pages/GroundWaterDischargesLicensesandLicensees.aspx> ACKNOWLEDGED, SEE ABOVE RESPONSE

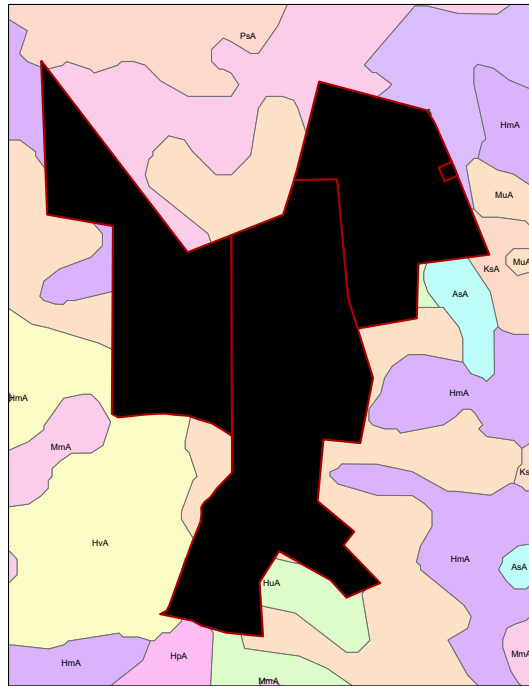


Figure 1: NRCS soil survey mapping update

0 235 470 940 Feet



Compliance with TMDLs through the Pollution Control Strategy (PCS)

Compliance with the TMDL nutrient and bacterial reduction requirements specified for the Inland Bays watershed can be facilitated by adherence to the strategies and requirements described in the Inland Bays PCS, and the implementation of the following recommended BMPs, which would:

- Preserve and/or maintain as much of the existing forested area as possible. We suggest the planting of native tree and/or herbaceous vegetation, wherever practicable.

ACKNOWLEDGED. NATIVE PLANTINGS ARE PROPOSED FOR ALL LANDSCAPE BUFFERS AND FORESTED AREAS HAVE BEEN PRESERVED AS MUCH AS POSSIBLE

- Have a United Army Corps of Engineers approved wetlands delineation (USACE) conducted by a qualified soil scientist (Delaware licensed Class-D soil scientist) before commencing any construction activities. Statewide wetland mapping project (SWMP) and NRCS soil survey mapping suggests that wetlands and hydric soils are present in subject parcel (Figures 1 & 2). It is not clear from the information submitted whether a wetland delineation was conducted or not based on information submitted in the TAC application. A field based site-specific wetlands delineation by a licensed soil scientist is should be conducted to more precisely assess the presence of wetlands and hydric soils in this parcel (prior to obtaining the recommended approval from the USACE). A list of licensed Class D soil scientists can be obtained at the following web link:

<http://www.dnrec.delaware.gov/wr/Information/GWDInfo/Pages/GroundWaterDischargesLicensesandLicensees.aspx>

A WETLAND DELINEATION INVOLVING THE ENTIRE HAS BEEN COMPLETED BY JAMES C. McCULLLEY IV, PWS (#000471) AND A COPY OF THAT REPORT AND WETLANDS BOUNDARY SURVEY IS ENCLOSED IN THIS SUPPLEMENTAL DATA BOOK.

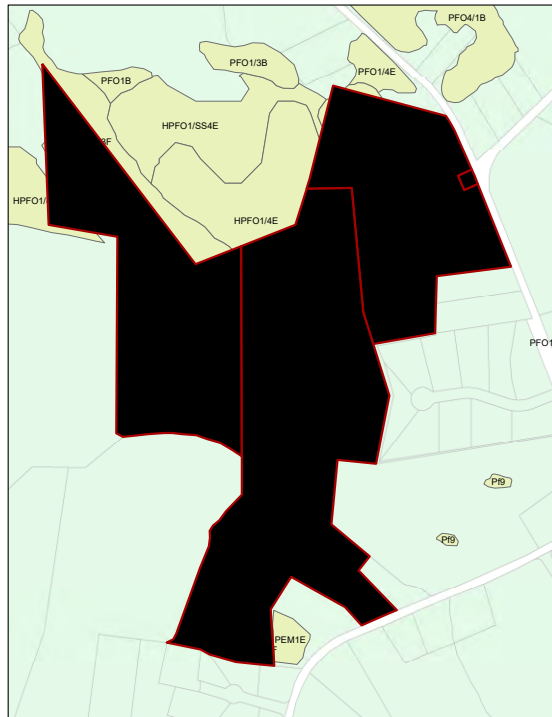


Figure 2:SWMP mapping

0 235 470 940 Feet



- Establish a vegetated buffer of at least 100 feet from the adjoining wetlands and waterbodies. Based on a review of existing buffer research by Castelle et al. (Castelle, A. J., A. W. Johnson and C. Conolly. 1994. Wetland and Stream Buffer Requirements – A Review. J. Environ. Qual. 23: 878-882.), an adequately-sized buffer that effectively protects wetlands and streams, in most circumstances, is about 100 feet in width. In recognition of this research and the need to protect water quality, the Watershed Assessment Section recommends that the applicant maintain/establish said 100-foot vegetated buffer (planted in native vegetation) from all waterbodies (including all ditches and ponds) and all non-tidal (USACE approved wetlands delineation) and tidal wetlands (State-approved wetlands delineation for State-regulated tidal wetlands, if and where applicable). It is apparent from the conceptual lot layout that the applicant intends to maintain/establish a buffer width considerably narrower than the 100-foot buffer width that we recommend.

ACKNOWLEDGED - BUFFERING FROM ISOLATED WETLANDS IS NOT PROPOSED

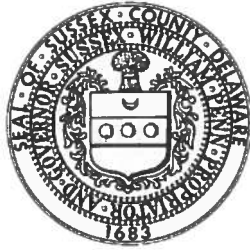
- Calculate post-construction surface imperviousness with all forms of created (or constructed) surface imperviousness (e.g., rooftops, driveways, parking lots, sidewalks, open-water storm water management structures, ponds, and roads) included in the calculation for surface imperviousness. Omission of any of the above-stated forms of surface imperviousness will result in an underestimate of the actual post-development surface imperviousness and the environmental impacts associated with this imperviousness.

ACKNOWLEDGED - ALL FORMS OF IMPERVIOUS SURFACES WILL BE INCLUDED FOR SWM DESIGN

- Employ green-technology storm water management and a rain garden(s) (in lieu of open-water management structures) as BMPs to mitigate or reduce nutrient and bacterial pollutant runoff. If open-water stormwater management is selected for use, they should be employed for their intended function - that is, the management of stormwater - not for the creation of additional pond acreage to enhance property/aesthetic values. It should also be noted that open-water stormwater ponds attract nuisance geese and nuisance algae that can contribute to the degradation of water quality of waters in the greater Inland Bays watershed. In the end, we strongly recommend that the applicant use green-technology stormwater management and refrain from use of open-water stormwater management ponds and/or open-water ponds of any kind or purpose for this project. Based on our review of the project plan, at least six (6) ponds are proposed for this parcel. The number of ponds proposed by the applicant, we believe, is excessive or not consistent with the guidelines for good environmental project design. Again, we advise that no ponds be installed and green-technology stormwater management be pursued. **ACKNOWLEDGED**
- Make use of pervious paving materials (when compatible with concerns for the protection of excellent recharge areas and/or well-head protection areas via assessment by a DNREC hydrogeologist(s)) instead of conventional paving materials (e.g., asphalt or concrete) to help reduce the amount of water and pollutant runoff draining to adjoining streams and wetlands. Pervious pavers are especially recommended for areas designated for parking. **ACKNOWLEDGED**
- Assess nutrient and bacterial pollutant loading at the preliminary project design phase. To this end, the Watershed Assessment Section has developed a methodology known as the "Nutrient Load Assessment protocol." The protocol is a tool used to assess changes in nutrient loading (e.g., nitrogen and phosphorus) resulting from the conversion of individual or combined land parcels to a changed land use(s); thus providing applicants and governmental entities with quantitative information about the project's impact(s) on baseline water quality. We strongly encourage the applicant/developer use this protocol to help them design and implement the most effective BMPs. Please contact John Martin at (Division of Watershed Stewardship) 302-739-9939 for more information on the protocol. **ACKNOWLEDGED**

ENGINEERING DEPARTMENT

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



Sussex County

DELAWARE
sussexcountyde.gov
HANS M. MEDLARZ, P.E.
COUNTY ENGINEER
MICHAEL E. BRADY
DIRECTOR OF PUBLIC WORKS

October 24, 2018

REF: **SUSSEX COUNTY ENGINEERING DEPARTMENT
T. A. C. COMMENTS
WILLOW RUN
TIER 4 SEWER DISTRICT
SUSSEX COUNTY TAX MAP NUMBER
134-18.00 PARCEL 55.00
PROJECT CLASS – 1
AGREEMENT NO. 1110**

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

PUBLIC WORKS DIVISION COMMENTS

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

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



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

7. The project requires professional land surveying services to accurately delineate, and show the following items but is not limited to the following: all property and right-of-way lines, established at a minimum, two (2) horizontal and vertical control concrete project benchmarks, survey monuments, easements, existing and proposed topographic contours at 1-foot vertical intervals and spot elevations as necessary to establish grades, the locations of all existing structures, highway and roadway pavements, shoulders, curbs, driveways, sidewalks, lighting structures, traffic control signs, and all public and private utilities, including, but not limited to, electric power and telephone lines, poles and boxes, underground electric, telephone, and communication lines, potable water lines, fire hydrants and valve boxes, gas lines, wells, sanitary sewers including septic systems, rim and invert elevations of manholes and cleanouts, and the rims and invert elevations and type of storm water structures, drainage ditches, ponds, streams and waterways, flood zones and flood zone boundaries and elevations, and State and Federal wetlands, trees, cemeteries and historic features, and the finished floor elevations of buildings. **ACKNOWLEDGED**
8. Plans shall show the seal and signature of a registered Delaware land surveyor or registered Delaware professional engineer. **ACKNOWLEDGED**
9. The plan requires a Certification Signature and/or a Certification Block for the Delaware Professional Engineer or Delaware Land Surveyor. **ACKNOWLEDGED**
10. The plan requires a Certification Signature and/or a Certification Block for the Owner or Representative of the Owner. **ACKNOWLEDGED**
11. The plan requires a Certification Signature and/or a Certification Block for the Professional Wetlands Delineator. **ACKNOWLEDGED**
12. The name, address, phone number and contact person's name of the Owner of Record, the Developer and the Engineer or Surveyor preparing the plan. **ACKNOWLEDGED**
13. Indicate the location of all wetlands, both state and federal, to facilitate compliance with County, State and Federal requirements. **ACKNOWLEDGED**
14. Define the courses and distances of the property perimeter and the approximate acreage contained therein. Establish and set in the field two (2) CONCRETE MONUMENT project bench marks, preferably at property perimeter corners, geo-referenced to the Delaware State Plane Coordinate system NAD 83 and show the location including the North and East coordinates of the marks on the plans. **ACKNOWLEDGED**
15. Indicate the development construction phases proposed showing the boundaries of each phase. Phasing boundaries shall include buildings, residential units, amenities, roads, storm water management facilities, wastewater systems and all other improvements and utilities required to service each phase. **ACKNOWLEDGED**
16. Show the layout, width and names of all streets, alleys, crosswalks and easements proposed to be dedicated for private or public use. Street names shall not duplicate nor closely resemble existing street names in the same hundred or postal district, except for extensions of existing streets. **ACKNOWLEDGED**

17. Provide the limits and elevations of the one-hundred (100) year flood. This may require the design engineer to complete an analysis and provide a report including the depiction of the subject watershed(s), calculations and other technical data necessary to determine the limits and elevations base flood. The design engineer must resolve discrepancies, if any, between surveyed topography and the FEMA Flood Insurance Rate Maps. THE ENTIRE GOOD WILL FARM SITE LIES WITHIN THE "X" ZONE AS MAPPED BY FEMA
18. False berms shall not be utilized to create roadside drainage swale back slopes. ACKNOWLEDGED
19. For parking lots and drives, provide spot elevations at the edge of pavement, right-of-way or travel way centerline, at changes in grade, and high points and low points, to the nearest drainage facilities. Show the limits of the various surface materials and provide construction sections. ACKNOWLEDGED
20. Provide and show the locations and details of all ADA compliant accessible walks and ramp features. ACKNOWLEDGED
21. If the site has a cemetery located on it the Developer shall contact the Delaware State Historic Preservation Office and satisfy the requirements of that Office prior to beginning any construction activity. This area shall not be disturbed by this project. Adequate access to the site and buffers to protect the site, shall be provided. NO CEMETARY EXISTS WITHIN THE GOOD WILL FARM SUBDIVISION SITE
22. Private rights-of-way adjacent to and abutting parcels not part of the project shall be located and designed to provide adequate buffer so that construction activities do not encroach onto adjacent properties. ACKNOWLEDGED
23. Provide statements explaining how and when the developer proposes to provide and install the required water supply, sewers or other means of sewage disposal, street pavement, drainage structures and any other required improvements. ACKNOWLEDGED
24. Provide statements concerning any proposed deed restrictions to be imposed by the owner. ACKNOWLEDGED
25. Where special physical conditions exist, which may act as constraints on normal development or may preclude development, the developer may be required to submit special technical data, studies or investigations. This information must be prepared by individuals technically qualified to perform such work. Additional information may include but is not limited to the following: on-site sanitary sewage disposal feasibility, water supply surveys, such as test well drilling, storm water runoff computations and identification of areas subject to periodic flooding. ACKNOWLEDGED
26. If special conditions are found to exist, the Engineering Department may elect to withhold approval of a construction plan until it is determined that it is technically feasible to overcome such conditions. The Engineering Department may then require the developer to incorporate specific improvement design criteria into the plat as a condition to its approval. ACKNOWLEDGED
27. When special studies or investigations pertain to a regulatory program of another public agency, the developer shall submit the results of these studies or investigations to said public agencies for technical review and approval. Approvals and/or written comments from these agencies shall be supplied to Sussex County by the developer. ACKNOWLEDGED

UTILITY PLANNING DIVISION COMMENTS

REVIEWER: **Rob Davis**

APPLICATION: **2018-24 – Willow Run**

APPLICANT: **Gulfstream Development, LLC**

FILE NO: **SPS – 5.04**

TAX MAP &
PARCEL(S): **134-18.00-55.00, 134-18.00-5.00 & 134- 19.00-6.00**

LOCATION: **South of Ocean View on Bayard Road, at the intersection of Peppers Corner Road and Central Avenue.**

NO. OF UNITS: **104**

GROSS
ACREAGE: **56.41**

SYSTEM DESIGN ASSUMPTION, MAXIMUM NO. OF UNITS/ACRE: **4**

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 2**

(3). Is wastewater capacity available for the project? **Yes, As Proposed** If not, what capacity is available?

(4). Is a Construction Agreement required? **Yes** If yes, contact Utility Engineering at (302) 855-7717.

(5). Are there any System Connection Charge (SCC) credits for the project? **No** If yes, how many? Is it likely that additional SCCs will be required? **Yes** If yes, the current System Connection Charge Rate is **\$6,360.00** per EDU. Please contact **Blair Lutz** at **302-855-7719** for additional information on charges.

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

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

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

(8). **Comments: The project proposes a cluster subdivision of 104 single family lots. The project is located in both Tier 2 and Tier 4 areas of the Sussex County sewer planning areas. The proposed project is within design assumptions for the sewer system and sewer capacity is available for the project as proposed. Sussex County does not have a schedule to provide sanitary sewer service to the area of the proposed development. The proposed project is within a planning area for the Sussex County Unified Sanitary Sewer District but is not contiguous with the current sewer district boundary. Additional parcels need to be included in an annexation and it is the developer's responsibility to obtain additional property owner participation in an annexation request. The developer must install infrastructure to an approved connection point to receive sewer service. The developer must extend sewer service to all adjoining parcels that are not currently served with central sewer. Sussex County requires design and construction of the collection and transmission system to meet Sussex County sewer standards and specifications. One-time system connection charges will apply. Please contact Ms. Blair Lutz 302 855-7719 for additional information on charges.**

(9). Is a Sewer System Concept Evaluation required? **Yes, Contact Utility Planning at 302-855-1299 to apply**

(10). Is a Use of Existing Infrastructure Agreement Required? **Yes**

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

Policy for Extending District Boundaries

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

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

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



September 20, 2018

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 applications:

1. **Applications:** **2018-23 Patriots Glen**
 2018-24 Willow Run

These applications indicate central water will be supplied by Tidewater Utilities, Inc. *These projects require 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. **ACKNOWLEDGED**

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. **ACKNOWLEDGED**

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

Sincerely,

A handwritten signature in blue ink, appearing to read "William J. Milliken, Jr.".

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

DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

**MAPPING
&
ADDRESSING
NAMES APPROVALS**

MAPPING & ADDRESSING

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



Sussex County

DELAWARE
sussexcountyde.gov

September 28, 2018

LandTech
Attn: Jeffery A. Clark
32895 Coastal Hwy, Unit 202
Bethany Beach, De. 19930

RE: **Proposed Subdivision Name(s)**

I have reviewed the name(s) submitted for your proposed subdivision **Good Will Farm**, which is located in Frankford (134-18.00-55.00&134-19.00-5.00&6.00). In reviewing the proposed name(s) the following has been **approved** for this subdivision:

GOOD WILL FARM

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

Sincerely,

Terri L. Dukes

Terri L. Dukes
Addressing Technician II

CC: Christin Headley
Planning & Zoning



MAPPING & ADDRESSING

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



Sussex County

DELAWARE
sussexcountyde.gov

September 28 ,2018

LandTech
Attn: Jeffery A. Clark
32895 Coastal Hwy Unit 202
Bethany Beach, De. 19930

RE: **Good Will Farm**

I have received proposed street name(s) for the new subdivision, **Good Will Farm**, located in Frankford. In reviewing the proposed street name(s) the following have been approved:

Lost Creek Dr	Congress Ct	Carlisle Ct
Windsor Park Dr	Beach House Rd	Santa Fe Ct

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

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

Sincerely,

Terri L. Duker

Terri L. Duker
Addressing Technician II

CC: Christin Headley
Planning & Zoning



DESIGN SUMMARY AND SUPPLEMENTAL DATA

GOOD WILL FARM SUBDIVISION

**“DRAFT”
RESTRICTIVE
COVENANTS**

TAX PARCELS: 1-34-18.00-55.00
& 134-19.00-5.00 & 6.00

Prepared by and Return to:

GULFSTREAM DEVELOPMENT LLC
27 Atlantic Ave.
Ocean View, DE 19970

DRAFT
DECLARATION
ESTABLISHING A PLANNED COMMUNITY
OF PREMISES SITUATED IN
BALTIMORE HUNDRED,
SUSSEX COUNTY, DELAWARE, PURSUANT
TO THE DELAWARE UNIFORM COMMON INTEREST UNIT OWNERSHIP ACT
FOR
GOOD WILL FARM SUBDIVISION

THIS DECLARATION is made and executed on this 1ST DAY OF OCTOBER, 2018, by **Gulfstream Development LLC**, hereinafter collectively referred to as the “Developer”.

WHEREAS, the Developer is the fee simple owner of certain real property located in Baltimore Hundred, Sussex County and State of Delaware. The lands of GOOD WILL FARM which are owned by Gulfstream Development LLC, all of which are described in Exhibit “A” hereto, and the Developer desires to develop on the lands described in Exhibit “A” hereto a unified community; and

WHEREAS, the Developer is the owner of the parcels of land described in Exhibit “A” and the Developer, as the owner of Exhibit “A” hereto, has caused to be recorded a Subdivision Plot for a part of the lands of Exhibit “A” hereto which are designated as the Subdivision Plan of GOOD WILL FARM, dated _____ and recorded in the Office of the Recorder of Deeds in and for Sussex County, Delaware in Plot Book ____, Page ____, hereinafter referred to as the “Plot”; and hereby submits to the provisions of the Delaware Uniform Common Interest Unit Ownership Act, 25 Del. C. Section 81-101, *et seq.* (hereinafter referred to as the “Act”), in order to create a Planned Community Unit Ownership of the Land, and

WHEREAS, the Developer desires to provide for the preservation of the values and amenities in said community and for the maintenance of common lands and facilities and to this end, desires to subject the Property to the covenants, restrictions, easements, charges and liens (hereinafter referred to collectively as the “Restrictions”), as hereinafter set forth, for the benefit of the Property and each owner thereof; and;

WHEREAS, the Developer has deemed it desirable for the efficient preservation of values and amenities in said community, to create an agency to which will be delegated and assigned the powers of maintaining and administering any community facilities, common lands and recreational amenities and administering and enforcing the covenants and restrictions and levying, collecting and disbursing the assessments and charges hereinafter created; and

WHEREAS, the Developer will incorporate under the laws of The State of Delaware as a nonprofit corporation, GOOD WILL FARM Homeowners Association, Inc., or a similar corporation, for the purpose of exercising the functions aforesaid; and

WHEREAS, it is the intention of the Developer, by this Indenture, and by future amendments or supplements to this Indenture, to set aside certain interests in the real estate and to impose upon certain portions of the real estate the condition that they be held as Common Areas, and Recreation Areas in which the owners in the Development will have and “in common interest” and easements of enjoyment therein, the ultimate title of which shall be placed in a Association comprised of the owners and being a nonprofit membership corporation.

NOW THEREFORE, the Developer hereby declares that the following Restrictions shall run with, burden and bind the lands and future lands to be acquired by Developer in the said Subdivision of GOOD WILL FARM as described in Exhibit “A”; and the Developer hereby declares that the lands of Exhibit “A” shall be held, transferred, sold, conveyed, occupied and used, subject to the restrictions hereinafter set forth during the period of time hereinafter set forth; and subject to all easements, rights-of-way and restrictions previously placed upon the Property as recorded in the Office of the Recorder of Deeds in and for Sussex County, by the Developer or its predecessors in title.

ARTICLE I: DEFINITIONS

The following words, when used in this Declaration (unless the context shall prohibit), shall have the following meanings;

- (A) “Association” shall mean and refer to GOOD WILL FARM Homeowners Association, Inc. or such other nonprofit corporation, as the Developer shall form, its successors.
- (B) “Act” means the Delaware Uniform Common Interest Unit Ownership Act, Title 25 Delaware Code, Sections 81-101 through 81-421, as amended.
- (C) Board of Directors means those unit owners who have been elected to the Board in accordance with Article III, Section 1 of the Bylaws of Good Will Farm Homeowners Association. The initial Board members shall be Robert J. Harris, Jr. Edward C. Yegen Jr., and Robert Young.
- (D) “Buildings” means the residential structures to be constructed and intended to be used for residential purposes (including leasing of Units for residential purposes) or for any other lawful purpose or for any combination of such uses.

(E) “Bylaws” means such governing regulations as are adopted pursuant to the Act for the regulation and management of the Planned Community, including such amendments thereof as may be adopted from time to time, that are recorded in the Office of the Recorder of Deeds in and for Sussex County, Delaware.

(F) “Common Expenses” means and includes:

(1) All sums lawfully assessed against the Unit Owners by the Board of Directors.

(2) Expenses of administration, maintenance, repair, snow and ice removal from common walkways and streets, stormwater ponds and maintenance of the Common Elements, including repair and replacement reserves as may be established.

(3) Maintenance of landscaping and provisions for landscaping common element land, including, but not limited to, mowing of Common Areas and Residential Unit Areas, as determined by the Board of Directors.

(4) Expenses agreed upon as Common Expenses by the Unit Owners;

(5) Expenses declared Common Expenses by the provisions of the Act, by this Declaration, or the Bylaws;

(6) Premiums for insurance policies required to be purchased by the Board of Directors pursuant to the Bylaws;

(7) All valid charges against the Planned Community as a whole; and

(8) All funds expended by Declarant related to the construction and/or completion of any and all amenities, including, but not limited to, the Clubhouse and swimming pool referenced at Note 8 of the Record Plan, to be repaid to Declarant by the distribution to Declarant at each home/Lot Closing of the initial non-refundable capital contribution paid by Homebuyer in the amount as stated in Article V, Section 1 (e), as may be amended, of the Bylaws for Hawthorne Homeowners Association, Inc.

(9) Notwithstanding the provisions of paragraph 24 (w) herein, each unit owner shall be responsible to maintain and mow the grass in the front, rear and side yards of each Unit, including grass areas within the roadside swales and within street rights-of-way abutting their lots.

(G) “Common Areas” shall mean and refer to those areas of land designated on the recorded subdivision plots of the Property as the storm water management facilities, erosion and sediment control facilities, **FORESTED BUFFERS** and the roads designated as _____ All said Common Areas should be subject to all

restrictions, easements or rights-of-way previously granted by the Developer or its predecessors in title.

- (H) “Developer or Declarant” shall mean and refer to Gulfstream Development, LLC.
- (I) “Lot or Unit” shall mean and refer to any unimproved or improved residential plot of land intended and subdivided for a detached single-family residence described in Exhibit “A” and future lands to be acquired by Developer in the said Subdivision of GOOD WILL FARM.
- (J) “Member” shall mean and refer to all those owners who are members of the Association as provided in Article II, Section I of this Declaration.
- (K) “Mortgage” shall mean and refer to any mortgage, deed of trust or similar instrument granted as security for the performance of any obligation.
- (L) “Owner” shall mean and refer to the record owner, whether one or more persons or entities, holding a fee simple title to any lot, but shall not mean or refer to any mortgagee or subsequent holder of a mortgage, unless and until such mortgage or holder has acquired title pursuant to foreclosure or any proceeding in lieu of foreclosure.
- (M) “Planned Community” means the Land and the Buildings and all other improvements and structures to be constructed thereon owned in fee simple, and all easements, rights and appurtenances belonging thereto which have been or are intended to be submitted to the provisions of the Act.
- (N) “Recorded” means that an instrument has been duly entered of record in the Office of the Recorder of Deeds, in and for Sussex County, Delaware.
- (O) “Recorder” means the Office of the Recorder of Deeds, in and for Sussex County, Delaware, located in Georgetown, Delaware.
- (P) “Resale Certificate” means the instrument pursuant to Section 81-409 of Title 25 of the Delaware Code required to be provided by the Association to the owner of the Unit and necessary to enable the Owner to comply with the requirements of Section 81-409 for the sale of the Unit. The instrument is to be substantially in form attached hereto as Exhibit “C”.
- (Q) “Revocation” means an instrument signed by all the Unit Owners and by all holders of liens against the Units by which the Land is removed from the provisions of the Act.
- (R) Restrictive and Protective Covenants means such rules and regulations as may be adopted from time to time by the Declarant or Board of Directors in accordance with Section 81-320 of the Act that are deemed necessary for the enjoyment of the Planned Community, provided they are not in conflict with the Act, this Declaration, or the Bylaws.

ARTICLE II: MEMBERSHIP AND VOTING RIGHTS

Section 1. Every owner of a lot which is subject to assessment of subject to a late assessment shall be a member of the Association, provided, however, that any such person or entity who holds such interest merely to secure a performance of an obligation shall not be a member, unless and until such person or entity has succeeded to such owner's interest by enforcement of such security interest. Membership shall be appurtenant to any may not be separated from the ownership of any lot which is subject to assessment. Provided, however, that the Developer shall be considered an owner of each lot held by the Developer whether such lot or lots are or are not subject to assessment.

Section 2. The Association shall have two classes of voting membership:

(a) Class A members shall be all lot owners (with the exception of Declarant) of a lot in the recorded Subdivision Plot of GOOD WILL FARM who shall be entitled to one (1) vote for each lot. When more than one person holds an interest in any lot, all such persons shall be members. The vote of such lot shall be exercised as they among themselves determine; but in no event shall more than one (1) vote be cast with respect to any lot.

(b) Class B members shall be the Developers or its assigns and shall be entitled to three (3) votes for each lot owned.

Class B membership will revert to Class A membership no later than June 1, 2030.

ARTICLE III: PROPERTY SUBJECT TO DECLARATION

Section 1. Existing Property. The real property subject to this Declaration is all that property located in Baltimore Hundred, Sussex County and State of Delaware, shown on the recorded Plot, which is incorporated herein by reference and as described in Exhibit "A" attached hereto and incorporated herein by reference; and this Declaration and the lands subject to this Declaration shall also be subject to restrictions, easements or rights-of-way previously granted by the Developer, or its predecessors in title, as recorded in the Office of the Recorder of Deeds in and for Sussex County, Delaware.

Section 3. Mergers. Upon a merger or consolidation of the Association with another association as provided in its Certificate of Incorporation, its properties, rights and obligations may, by operation of law, be transferred to another surviving or consolidated association, or

alternatively, the properties, rights and obligations of another association may, by operation of law, be added to the properties, rights and obligations of the association as surviving corporation pursuant to a merger; provided, however, that such a merger shall have been approved by a vote of two-thirds (2/3) of the Class A Membership, at a meeting duly called for such a purpose. The surviving or consolidated association may administer the covenants and restriction established by this Declaration within the Property, together with covenants and restrictions established upon any other properties as one community. No such merger or consolidation, however, shall effect any revocation or change to the covenants established by this Declaration with the Property.

ARTICLE IV: PROPERTY RIGHTS IN THE COMMON AREAS

Section 1. Owner's Easement of Enjoyment. Subject to the provisions of Section 3 of Article IV, every owner shall have a right and easement of enjoyment in and to the common areas, and such easement shall be appurtenant to and shall pass with the title to every lot.

Section 2. Title to Common Areas. The Developer shall not convey legal title in the common areas: (1) until such time as it has completed improvements thereon; and (2) until such a time as, in the opinion of the Developer, the Association shall be able to maintain the same. Notwithstanding any other provisions herein, the Developer hereby covenants for itself, its successors and assigns, that it shall convey all its right, title and interest in the Common Areas to the Association, subject to all previous restriction of record and this Declaration not later than June 1, 2030

Section 3. Extent of Member's Easements. The rights and easements of enjoyment created hereby shall be subject to the following:

- (a) The right of the Association as provided in its Certificate of Incorporation and by-laws, to suspend the enjoyment rights of any member in any easement or in any common areas, for any period during which any assessment against such member remains unpaid, and for any period not to exceed sixty (60) days for any infraction of the Association's published rules and regulations.
- (b) The right of the Association and/or the Developer to dedicate or transfer all or any part of its interest in the common areas (subject to easements created hereunder, or previously created of record) to any public agency, authority or utility.
- (c) The right of the Developer, prior to the conveyance of the common areas to the Association, and of the Association, to grant and reserve easements and rights-of-way through, under, over and across the common areas, for the installation, maintenance and inspection of lines and appurtenances for water, sewer, drainage, gas, electricity, telephone, cable television and other utilities.
- (d) The right of the Association to adopt rules and regulations governing the use by the owners of the common areas.

Section 4. Delegation of Use. Any owner may delegate his right of enjoyment to the common areas and facilities to the members of his family, tenants or contract purchaser (and members of the family of any tenant or contract purchaser) who resides on the property or to such other persons as may be permitted by the Association.

Section 5. Obligation of the Association. The Association shall:

- (a) Operate, install and maintain, for the use and benefit of all members of the Association, all common areas and facilities and improvements developed thereon including roads. It shall be the property owner's responsibility to maintain right-of-way areas between his property line and the road pavement.
- (b) Maintain and install all facilities on, mow the grass on, replace all dead or destroyed original landscaping on, all common areas, **including any forested buffers as shown on the approved subdivision plan as recorded in the land records of Sussex County**.
- (c) Contribute to the maintenance of off-site storm water management facilities.

Good Will Farm association shall be solely responsible for the maintenance and repair of all storm water piping and structures on its own property and for all piping and structures delivering storm water into off-site drainageways.

ARTICLE V
EXPENSES AND ASSESSMENTS

Section 1. Determination of Common Expenses and Assessments Against Owners.

- (a) Fiscal Year: The fiscal year of the Association shall be the calendar year.
- (b) Preparation and Approval of Budget.
 - (1) Each year on or before December 1, the Board of Directors shall adopt a budget containing an estimate of the total amount which it considers necessary to pay the cost of maintenance, management, operation, repair and replacement of the Common Elements, insurance premiums, services, supplies and other expenses that may be declared to be Common Expenses by the Act, the Declaration, the Bylaws or a resolution of the Association, and which will be required during the ensuing fiscal year for the administration, operation, maintenance and repair of the Planned Community and the rendering to the Unit Owners of all related services. Such budget shall also include such reasonable amounts as the Board of Directors considers necessary to provide working capital for the Planned Community, and if so elected by the Board of Directors, a general operating reserve and reserves for contingencies and replacements.
 - (2) The Board of Directors shall send to each Unit Owner a copy of the budget, in a reasonably itemized form which sets forth the amount of the common expenses payable by each owner, on or before the commencement of the next ensuing fiscal year to which the budget

applies. The said budget shall constitute the basis for determining each Unit Owner's contribution for the common expenses and the Planned Community assessments.

(a) Within thirty (30) days after adoption of any proposed budget after the Declarant Control Termination Date, the Board of Directors shall provide to all Unit Owners a summary of the budget, including any reserves and a statement of the basis on which any reserves are calculated and funded. Simultaneously, the Board of Directors shall set a date for a meeting of the Unit Owners to consider ratification of the budget not less than fourteen (14) nor more than sixty (60) days after providing the summary. Unless at that meeting a majority of all Unit Owners reject the budget, the budget is ratified, whether or not a quorum is present. If a proposed periodic budget is rejected, the periodic budget last ratified by the Unit Owners must be continued until such time as the Unit Owners ratify a subsequent budget proposed by the Board of Directors.

(b) In addition to adoption of its regular periodic budget, the Board of Directors may at any time propose a budget which would require a special assessment against all the Units. Except as provided in subsection 2(a) of this Section, the special assessment is effective only if the Board of Directors follows the procedures for ratification of a budget described in subsection (1) of this Section and the Unit Owners do not reject that proposed special assessment.

(c) If the Board of Directors determines by unanimous vote that the special assessment is necessary in order to respond to an emergency, then: (i) the special assessment shall become effective immediately in accordance with the terms of the vote; (ii) notice of the emergency assessment shall be promptly provided to all Unit Owners; and (iii) the Board of Directors shall spend the funds paid on account of the emergency assessment solely for the purposes described in the vote.

(c) Assessment and Payment of Common Expenses. The total amount of estimated funds required for the operation of the Planned Community set forth in the budget for the fiscal year adopted by the Board of Directors shall be assessed against each Unit Owner in proportion to such Unit Owner's respective percentage interest in the Planned Community, and shall be a lien against each Unit Owner's Unit as of the first day of the fiscal year to which such budget applies. Payment of the annual assessment shall be due on the schedule of payments set by the Board of Directors. The Board of Directors shall supply to all Unit Owners an itemized accounting of the common expenses for the last ensuing fiscal year actually incurred and paid, together with a tabulation of the amounts collected pursuant to the budget adopted by the Board of Directors for such fiscal year, and showing the net amount over or short of the actual expenditures in conjunction with preparing a new budget for the next ensuing fiscal year. Any common expense or portion thereof included as part of the common expense budget, but benefiting fewer than all of the Units, including fees for services provided by the Association to the occupants of individual Units, shall be assessed exclusively against the Units based on their use and consumption of services. Assessments to pay a judgment against the Association may be made only against the Units in the Planned Community at the time the judgment was entered, in proportion to their common expense liabilities. If any common expense is caused by the misconduct of any Unit Owner or a Unit Owner's guests or invitees, the Association may assess that expense exclusively against the Unit of that Unit Owner. If common expense liabilities are reallocated, common expense assessments and any installment thereof not yet due must be recalculated in accordance with the reallocated common expense liabilities.

(d) Reserves. The Board of Directors may elect to build up and maintain reasonable reserves for working capital, operations, contingencies and replacements. Extraordinary

expenditures not originally included in the original budget which may become necessary during the year shall be charged first against such reserves. If the Board of Directors determines that the reserves are inadequate for any reason, including non-payment of any Unit Owner's assessment, the Board of Directors may at any time levy a further assessment (before or after the Declarant Termination Date), which shall be assessed against the Unit Owners according to their respective percentage interests, and which may be payable in a lump sum or in installments as the Board of Directors may determine. The Board of Directors shall serve notice of any further assessment on all Unit Owners by a statement in writing giving the amount and reasons therefor, and such further assessment shall, unless otherwise specified in the notice, become effective with the next monthly payment which is due more than ten (10) days after the delivery or mailing of such notice of further assessment. All Unit Owners shall be obligated to pay the adjusted assessment on the dates specified by the Board of Directors.

(e) Yearly Assessments. When the first Board of Directors appointed by the Owner under these Bylaws takes office, it may determine the budget, as defined in this Section, for the period commencing upon the sale of the first Unit by the Declarant or Dealer and ending on the calendar year in which such first sale occurs. Until changed by the Board of Directors, an initial yearly assessment due from each Unit Owner shall be \$950.00 per Unit. This initial yearly assessment shall be prorated based on the calendar year in which the Unit is sold from the Declarant or Dealer. The amount of future yearly assessment shall be fixed annually by the Board of Directors and shall be charged or assessed in equal proportions against each Unit for any year. In addition to the regular annual assessments and the normal and customary closing expenses, each purchaser will be required to make, at settlement on such purchaser's Unit, an initial non-refundable capital contribution to the Association of \$750.00.

(f) Effect of Failure to Prepare or Adopt Budget. The failure or delay of the Board of Directors to prepare or adopt the annual budget for any fiscal year shall not constitute a waiver or release in any manner of a Unit Owner's obligation to pay his allocable share of the common expense as herein provided, whenever the same shall be determined, and in the absence of any annual budget or adjusted budget, each Unit Owner shall continue to pay the assessment charge at the then existing monthly, quarterly or annual rate last established for the previous fiscal period until each new annual or adjusted budget shall have been mailed or delivered.

(g) Accounts. All sums collected by the Board of Directors with respect to assessments against the Unit Owners may be commingled into a single fund, but shall be held for each Unit Owner in accordance with the percentage interest attributable to the Unit. Any surplus funds of the Association remaining after payment of or provision of common expenses and any prepayment of reserves must be paid annually to the Unit Owners in proportion to their common expense liabilities or credited to them to reduce their future common expense assessments.

Section 2. Payment of Common Expenses.

All Unit Owners shall be obligated to pay the common expenses assessed by the Board of Directors pursuant to the provisions of this Article V. No Unit Owner may exempt himself or herself from liability for this contribution toward common expenses by waiver of the use or enjoyment of any of the common elements or by the abandonment of the Unit Owner's Unit. No

Unit Owner shall be liable for the payment of any part of the common expenses assessed against their Unit subsequent to a sale, transfer or other conveyance by him of such Unit. The purchaser of a Unit shall be jointly and severally liable with the selling owner for all unpaid assessments against the latter for his proportionate share of the common expenses up to the time of the conveyance, without prejudice to the purchaser's right to recover from the selling owner the amounts paid by the purchaser therefor; provided, however, that any such purchaser shall be entitled to a statement from the Board of Directors or managing agent setting forth the amount of the unpaid assessments against the selling owner and such purchaser shall not be liable for, nor shall the Unit conveyed be subject to a lien for, any unpaid assessments in excess of the amount therein set forth; and provided, further, that if a mortgage of a first mortgage of record or other purchaser of a Unit obtains title to the Unit as a result of foreclosure of a first mortgage, such purchaser, its successors and assigns, shall not be liable for, and such Unit shall not be subject to, a lien for the payment of common expenses assessed prior to the acquisition of title to such Unit by such purchaser pursuant to the foreclosure sale. Such unpaid share of common expenses assessed prior to the acquisition of title to such Unit by such purchaser pursuant to the foreclosure sale shall be collectible from all Unit Owners, including the purchaser of the foreclosure sale, in proportion to their respective percentage interests.

Section 3. Collection of Assessments.

The Board of Directors shall take prompt action to collect any assessments for common expenses due from any Unit Owner which remains unpaid for more than thirty (30) days from the due date for payment thereof.

Section 4. Effect of Nonpayment of Assessment.

(a) If any assessment is not paid on the date when due as above established, then the established fiscal year assessment (notwithstanding the fact that the Board of Directors has allowed for quarterly or monthly installments) shall be deemed due and delinquent and it shall, together with such interest thereon and costs of collection thereof, as hereinafter provided, establish the right of the Board of Directors to foreclose the lien on the Unit which shall bind such Unit in the hands of the then Unit Owner. In addition to such lien right, the obligation of the then Unit Owner to pay such assessment shall remain his personal obligation and shall not pass to his successors or assigns other than as a lien upon the Unit unless expressly assumed by them. If the assessment is not paid, within thirty (30) days of its due date, the entire fiscal year assessment shall bear interest at the Delaware rate on judgments from its due date, and the Board of Directors may bring an action against the Unit Owner or enforce the lien on the Unit, and in the event judgment is obtained, such judgment shall include interest at the maximum amount authorized by 25 Del. C., Section 81-316, reasonable attorneys' fees to obtain and enforce such judgment, and costs as fixed by the court.

(b) A lien under this Section is prior to all other liens and encumbrances on a Unit except (i) liens and encumbrances recorded before the recordation of the Declaration, (ii) a first or second security interest on the Unit recorded before the date on which the assessment sought to be enforced became delinquent, and (iii) liens for real estate taxes and other governmental assessments or charges against the Unit. The lien shall have priority over the security interests on

the Unit recorded before the date on which the assessment sought to be enforced became delinquent for an amount not to exceed the aggregate customary common expense assessment against such Unit for six (6) months as determined by the periodic budget adopted by the Association pursuant to Section 81-315(a) of the Act; provided that for the lien to have priority over the security interests on the Unit recorded before the date on which the assessment sought to be enforced became delinquent, the Association with assessments shall have recorded in the county in which the Planned Community is located a document which contains the name of the Association, the address, a contact telephone number, a contact email address and a web-site address, if any. In addition, the Association shall have recorded at any time, but not less than thirty (30) days prior to the Sheriff's sale of a Unit in its Planned Community for which common expense assessments are due, a statement of lien which shall include a description of such Unit, the name of the record owner, the amount due and the date due, the amount paid for recording the statement of lien and the amount required to be paid for filing a termination thereof upon payment, and the signature and notarized statement of an officer of the Association that the amount described in the statement of lien is correct and due and owing. Upon payment of the amount due, the payer shall be entitled to a recordable termination of lien for the amount paid. The liens recorded pursuant to this paragraph shall expire on the first day of the sixtieth (60th) month after recording. This subsection does not affect the priority of mechanics' or materialmen's liens, nor the priority of liens for other assessments made by the Association. The lien under this subsection is not subject to the provisions of homestead or other exemptions.

(c) A lien for unpaid assessments under this Section is extinguished unless proceedings to enforce the lien are instituted within three (3) years after the full amount of the assessments becomes due; provided, that a Unit Owner subject to a lien under this Section files a petition for relief under the United States Bankruptcy Code [11 U.S.C. § 101 et seq.], the period of time for instituting proceedings to enforce the Association's lien shall be tolled until thirty (30) days after the automatic stay of proceedings under § 362 of the Bankruptcy Code [11 U.S.C. § 362] is lifted.

(d) A judgment or decree in any action brought under this section must include costs and reasonable attorney's fees for the prevailing party

(e) The Association upon written request shall furnish to a Unit Owner a statement setting forth the amount of unpaid assessments against the Unit. If the Unit Owner's interest is real estate, the statement must be in recordable form. The statement must be furnished within ten (10) business days after receipt of the request and is binding on the Association, the Board of Directors, and every Unit Owner.

(f) The Association's lien may be foreclosed or executed upon as follows:

(1) The Association's lien must be foreclosed in like manner as a mortgage on real estate by equitable foreclosure or executed upon by other lawful procedures provided for in the Declaration;

(2) In the case of foreclosure, the Association shall give reasonable notice of its action to all lien holders of the Unit whose interest would be affected and to all other persons as would be required under applicable law for the foreclosure of a mortgage on real estate.

(3) The following restrictions apply to any action by the Association to foreclose its lien under this section:

(a) No foreclosure action may be commenced unless: (A) the Unit Owner, at the time the action is commenced, owes a sum equal to at least three (3) months of common expense assessments based on the periodic budget last adopted by the Association pursuant to § 81-315(a) of the Act; and (B) the Board of Directors expressly votes to commence a foreclosure action against that specific Unit.

(b) The Association shall apply any sums paid by Unit Owners who are delinquent in paying assessments as follows: (i) first, to unpaid assessments; (ii) then to late charges; (iii) then to attorneys fees and other reasonable collection charges and costs; and (iv) finally, to all other unpaid fees, charges, penalties, interest and late charges.

(c) If the only sums due with respect to a Unit consist of fines and related sums levied against that Unit, a foreclosure action may not be commenced against that Unit unless the Association has first secured a judgment against the Unit Owner with respect to those fines and has perfected a judgment lien against the Unit under state law.

ARTICLE VI: RESTRICTIVE AND PROTECTIVE COVENANTS

Section 1. Utility Easements. The Developer, for it, its successors and assigns, and for the Association, hereby reserve the right to grant easements over, under, in, on and through the common areas and all roads plotted and shown on the recorded plots for the installation, construction, reconstruction, relocation, removal, maintenance, repair, operation, inspection of water service, sewer, drainage, electric, gas, television, telephone, cable telephone and television facilities, wires, lines, conduits and other necessary and proper attachments in connection therewith, for the benefit of the adjoining land owners, the Developer, any federal, state or local authority, commission or agency having jurisdiction thereover, or any corporation, either public, quasi-public or private, supplying or serving such facilities.

Section 2. Utility Easements; Prior Restrictions. The properties are subject to all those prior easements, rights-of-way and restrictions placed upon the Property by the Developer's predecessors in title, as such recorded among the land records in the Office of the Recorder of Deeds in and for Sussex County.

Section 3. Residential Use. All lots in the Development shall be used for residential purposes exclusively. No structure, except as hereinafter provided, shall be erected, altered, placed or permitted to remain upon any such lot other than one (1) detached, single family dwelling (hereinafter sometimes referred to as the main dwelling), with attached or detached garage building. The use of any such main dwelling or accessory building shall not include any activity normally conducted as a business.

Section 4. Restrictions as to Types of Construction; Prohibiting Mobile Homes. No trailer, mobile home, double wide or similar type structure which moves to a building site on wheels attached to its own under carriage, tent, shack, garage, barn or other type outbuildings, shall at any time be used as a residence, temporary or permanently; and no trailer, mobile home,

double wide, tent, shack, garage or barn shall be utilized as a main or single family dwelling unit on any lot depicted in Exhibit "A".

Section 5. Restriction Against Business Use. No lot shall be used at any time to conduct business, or for the conduct of any trade or business of any description; nor shall said premises be used for any purpose whatsoever except for the purpose of private dwelling or residence. No building shall be used as a residence until the exterior is fully completed, according to the plans and specifications approved therefore, as such approval is hereinafter provided. No one shall reside on any lot, casually, temporarily or permanently, except in a dwelling house, completed according to the plans and specifications approved as hereinafter provided.

Section 6. Approval of Plans and Specifications Required. No building, boat house, garage, structure, fence, wall or other improvement, shall be commenced, erected, maintained or used; nor shall any addition to or change or alterations therein, or in the use thereof, be made upon any of the lots which are shown on the Exhibit "A", no matter for what purpose or use, until complete and comprehensive plans and specifications, showing the nature, kind, shape, height, materials, floor plans, exterior architectural scheme, location and frontage on the lot, approximate cost of such building, structure, or other erection, and the grading and landscaping of the lot to be built upon or improved, shall be submitted to and approved in writing by the Developer or by the Association, through its duly designated Architectural Review Committee, its successors and assigns, and until a copy of all such plans and specifications, finally approved as aforesaid, shall be logged permanently with the Association, its successors and assigns, providing that nothing herein shall require the aforesaid approval as to interior decorations, alterations or changes. The Association, its successors, and assigns, shall have the right to refuse approval of any such plans or specifications, or grading and landscaping plans or changes, which are not suitable or desirable in its or its successor's opinion, for aesthetic or other reasons. In passing upon such plans and specification or grading and landscaping plans, the Association, its successors and assigns, shall have the right to take into consideration the suitability of the proposed building, improvements or erections and/or the materials of which the building, other improvements or erections are to be built and the site upon which it is proposed to be erected and used, the harmony thereof with the surroundings and the effect of such improvements, additions, alterations or changed use, as planned, on the outlook from the adjacent or neighboring property, and any and all factors which, in its opinion, would affect the desirability or suitability of such proposed improvements, erections, alteration, or change. In order to insure the development and maintenance of the properties as a residential development of high standard, the owner of each lot, as depicted in Exhibit "A", by accepting title thereto or by occupying the same, hereby covenants and agrees that no building, structure or improvement shall be erected, altered, placed or permitted to remain upon any such lot or other land area, unless and until plans and specifications therefore have first met the requirements of this section.

Section 7. Resubdivision. No lot depicted in Exhibit "A" shall be resubdivided, sold or otherwise alienated in a lesser or smaller parcel, except in accordance with a supplemental plot plan thereof being approved by the Association or its successors and assigns, and recorded in the Office of the Recorder of Deeds in and for Sussex County, Delaware.

Section 8. Sanitation. Cesspools or outside toilets shall be absolutely prohibited. No outdoor incinerator shall be permitted unless flame or draft from same are enclosed and a permanent fire screen is approved by the Association, through the Architectural review Committee and/or those public agencies having jurisdiction. If public sewer is made available to all lots and such lot shall be connected to said public sewage system at the expense of the then lot owner.

Section 9. Signs and Advertising Regulated. No signs, notices or advertising matter of any nature or description shall be erected, used or permitted upon any of the lots shown on Exhibit "A", unless erected after securing the written permission of the Association, its successors and assigns. The Developer, however, retains the right to erect signs on any lot to advertise said lot for sale.

Section 10. Setback Restrictions; Height Limitations.

(a) The building setback requirements, height limitations and permitted accessory uses shall be the setback requirements, height limitations and permitted accessory uses as established by the Zoning Ordinance of the Sussex County, as such may be amended from time to time.

(b) In the event there is no Zoning Ordinance covering the property, the building setback requirements, height limitations and accessory uses shall be recommended by the Architectural Committee of the Association and formally adopted by the Association and submitted as an Amendment to these presents.

Section 11. Garbage Receptacles. Each lot shown on the recorded plot shall provide receptacles for garbage in a screened area not generally visible from any interior road, as shown upon the recorded Subdivision Plot of Good Will Farm, or provide underground garbage receptacles or similar facilities in accordance with reasonable standards established by the Association or its successors and assigns, and Sussex County.

Section 12. Storage Receptacles. No fuel tanks or similar storage receptacles or other hazardous materials may be installed on any lot either exposed to view or buried. A propane tank of no more than 30 lbs., or a gasoline tank of no more than 10 gallons may be kept on the lot if properly and safely stored.

Section 13. Construction and Demolition. Once construction or demolition of any building has been commenced on any lot, such construction or demolition shall proceed without delay until same is completed, except where such completion is impossible or results in great hardship to the owner or builder, due to strikes, fires, national emergencies or natural calamities. Cessation of work upon construction or demolition of any building once started and before completion thereof for a continuous period of sixty (60) days, shall be prima facie evidence of any attempt to abandon the same in its partially completed or demolished state and shall be deemed to be a public nuisance. In the event construction plans have been approved pursuant to Section 6, construction must commence pursuant to said approved plans within one (1) year of

the date of approval. Failure to commence construction within one (1) year of the date of approval of plans will void the approval.

Section 14. Fences. No boundary fence or wall shall be constructed to a height of more than four (4) feet. No wall or fence of any height shall be constructed upon any lot until the height, design, and approximate location thereof has been approved in writing by the Association or its successors and assigns. No boundary fence or wall shall be constructed within any front setback area; a privacy fence may be constructed to a height of up to six (6) feet if approved by the Association through its Architectural Committee.

Section 15. Nuisances. It shall be the responsibility of each owner to prevent the development of any unclean, unsightly or unkept conditions of buildings or grounds upon a lot which will tend to substantially decrease the beauty of the specific area. No noxious or offensive activity shall be permitted upon any lot; nor shall anything be done thereon tending to cause embarrassment, discomfort, annoyance or nuisance to the Property. There shall not be maintained upon any lot any plant, animal, device or thing of any sort, the normal activities of which are in any way noxious, dangerous, unsightly, unpleasant or of such a nature as may diminish or destroy the enjoyment of the Property. Specifically included under this Section is the prohibition against any livestock being kept on any lot. The keeping of any non-domestic animals shall be deemed a nuisance per se under this Section; but the keeping of domestic cats and dogs or other traditional household pets, unless the activity of such pets is in any way noxious, dangerous, unsightly or unpleasant, shall not be prohibited under this Section.

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

Section 16. Landscaping. No landscaping, shrubs or trees to be placed on or removed from any lot in conjunction with the erection of any main dwelling shall be planted until complete and comprehensive landscaping plans shall be submitted to and approved in writing by the Association through its duly designated Architectural review Committee. The land area not occupied by structures, hard-surfacing, vehicular driveways or pedestrian paths shall be kept planted with grass, trees, shrubs or other ground covering or landscaping in conformance with the standards set by the Architectural review Committee of the Association. Such standards will take into consideration the need for providing effective site development to:

- (a) enhance the site and building;
- (b) screen undesirable areas or views;
- (c) establish acceptable relationships between buildings, parking and adjacent properties;
and

(d) control drainage and erosion.

Section 17. Weeds and Undergrowth. No noxious weeds, undergrowth or accumulated trash of any kind shall be permitted to grow or maintain upon any lot by the owner or occupier thereof. The Association, its successors and assigns, reserve the right to notify the owner or occupier to cut and/or remove any such offending growth or trash. Within ten (10) days of the giving of notice in writing by the Association to the owner or occupier of any lot, to remove trash or control undergrowth or weeds, and in the event the owner or occupier shall fail or neglect to comply with any notice, the Association, its successors and assigns shall be empowered to enter upon such lot, together with such assistance and equipment as may be required, and thereupon to cut and/or remove the same, all without being deemed a trespasser, and all at the expense of owner of said lot. Any expense incurred by the Association, its successors and assigns, in conjunction with this Section, shall be billed to the owner and the owner agrees to remit same within thirty (30) days of the billing. Failure to remit within thirty (30) days of such bill, on the receipt thereof by the owner, shall entitle the Association, its successors and assigns, to bring suit for such charges; and in any such suit, the Association, its successors and assigns, shall be entitled to treble the amount of such expense it has incurred, plus the costs of said suit, and the reasonable attorney's fees incurred by it, enforcing this restriction. By the acceptance of any lot in the subdivision, each owner thereof hereby accepts this Section, and agrees that the treble damages and reasonable attorney's fees to collect same, for non-remittance of the expenses of the Association, its successors and assigns, incurred to remove trash or noxious growth, is reasonable and will constitute liquidated damages for the cost and expenses of the Association, its successors and assigns, in enforcing this restriction through litigation. This Section and any part hereof shall not be construed as an obligation on the part of the Association or its successors and assigns to provide garbage or trash removal services; nor shall it be construed as an obligation on the part of the Association or its successors and assigns to remove underbrush or rubbish or to cut grass or brush from any of the lots in the development, after same have been outconveyed by the Developer. However, the Association, its successors and assigns, reserves the right and privilege to enter upon any said lot for the purposes as set forth herein, being to maintain the appearance of any lots so as not to cause detriment to the community at large.

Section 18. Minimum Size and Exterior Finishes. No main dwelling shall be erected or used on any lot, the square footage of which shall be less than one thousand three hundred (1,300) square feet for a one-story house or one thousand six hundred (1,600) square feet for a two-story house, exclusive of all porches, breezeways, carports, garages and terraces, stoops and the like.

All exterior finish shall be double 4" horizontal siding, stone, stucco, or brick. Vertical siding (T-111 or the like) shall not be permitted.

Section 19. Parking Spaces. Each lot shall have provided space for parking two (2) automobiles off the private roads of the subdivision prior to occupying any dwelling constructed on any lot.

Section 20. Exterior Lights. Any exterior lights not attached to any permissible main structure placed or erected on any lot on the recorded Plot, shall not be in excess of six (6) feet in height above ground level. In no event shall any vapor or security exterior lights be placed on any lot in the subdivision, whether attached or not attached, to any building permitted pursuant to these restrictions.

Section 21. Pools – No swimming pool or spa may be constructed above ground. All pools shall be enclosed in accordance with Sussex County and Delaware state laws and regulations.

ARTICLE VII: GENERAL PROVISIONS

Section 1. Duration and Amendment. The restrictions of this Declaration run with the bind the Property and shall insure to the benefit and be enforceable by the Association or the owner of any lot subject to this Declaration, their respective legal representatives, heirs, successors and assigns, as the case may be, in perpetuity; subject, however, to the provision that the Association or its successors and assigns, by and with the vote or written consent of two-thirds (2/3) of the then owners of the lots, shall have the power to waive, abandon, terminate, modify, alter, change, amend, eliminate or add to these restrictions and this Declaration at any time hereafter.

Any such waiver, abandonment, termination, modification, alteration, change, amendment, elimination or addition shall take effect when a copy thereof executed and acknowledged by the Association, its successors and assigns, in accord with the usual form of execution and acknowledgement of Deeds, together with written consents of the requisite number of owners, has been filed for record in the Office of the Recorder of Deeds in and for Sussex County, Delaware, and the same shall thereafter remain in effect in perpetuity unless otherwise provided.

Section 2. Modification; Variance. In addition to the amendment power set forth in Article VII, Section I, the Association, its successors and assigns, through the Architectural Review Committee, shall have the power, in its sole discretion and for the purpose of aesthetics and providing a systematic development of the community, to waive, modify, or vary the restrictions establishing minimum setback requirements, front, side and rear lines, and minimum square footage required for any main structure built upon any lot.

In the event of the Association, its successors and assigns, through the Architectural review Committee, exercise its power, or in the event of any exercise of power to modify or grant a variance of the building square footage size, such grant of modification or variance shall take effect upon a copy of said grant of modification variance thereof executed and acknowledged by the Association, its successors and assigns, being filed for record in the Office of the Recorder of Deeds in and for Sussex County, Delaware, and the same shall thereafter remain in effect as to that lot in perpetuity; provided, however, that such modification or variance as to a particular lot shall have no effect as the setback restrictions and minimum square footage requirement of main residential structures as to any lot in the subdivision. It is specifically recognized that this right to grant a variance or modification as the setback

restriction and the minimum square footage requirement, is reserved and acknowledged to be in the Association, its successors and assigns, for the purpose of allowing each lot in the subdivision to be developed to that lot's maximum aesthetic potential, taking into consideration the configuration of the lot and preserving the value of the lot in question and lots which are adjacent or in close proximity to such lot which is the subject matter of the grant of any such modification or variance.

Section 3. Remedies. The Association, its successors and assigns, or any owner shall have the right to enforce this Declaration and the restrictions contained herein by any proceeding at law or in equity, against any person or persons violating or attempting to violate any provision of this Declaration or any restrictions contained herein, to restrain violation, to require specific performance and/or to recover damages, and to proceed against any lot to enforce any lien created by these restrictions. The expense of enforcement by the Association, its successors and assigns, shall be chargeable to the owner of the lot, including the cost of reasonable attorney's fees, in the event any legal action is taken by the Association, its successors and assigns, and such fees approved by a court of competent jurisdiction shall constitute a lien on the lot, collectible in the same manner as assessments hereunder.

Section 4. Assignability. The Developer, its successors and assigns, shall, at all times, have the right to fully transfer and assign any or all of its rights and powers under this Declaration, subject to the Developer's obligations hereunder.

Section 5. Nonwaiver. Failure of the Developer or any owner or their respective legal representatives, heirs, successors and assigns, to enforce any restrictions contained in this Declaration shall, in no event, be considered a waiver of the right to do so thereafter, as to the same violation or breach or as to such violation or breach occurring prior or subsequent thereto.

Section 6. Construction and Interpretation. The Association, its successors and assigns, to the extent provided herein, may adopt and promulgate reasonable rules and regulations regarding the administration, interpretation and enforcement of the provisions of this Declaration. In so adopting and promulgating such rules and regulations and in making any finding, determination, ruling or order, or in carrying out any directive contained herein relating to the issuance of permits, authorizations, approvals, rules and regulations, the Association, its successors and assigns, shall take into consideration the best interest of the owners and the end that Property shall be preserved and maintained as a viable community.

Section 7. Severability. All the covenants, conditions, restrictions and reservations contained in this Declaration are hereby declared to be severable and a finding by any court of competent jurisdiction that any of them or any clause or phrase thereof is void, unlawful or unenforceable, shall not affect the validity or enforceability of any other covenants, conditions, restrictions and reservations, clause or phrase thereof.

Section 8. Nonliability. Nothing contained in this Declaration shall be construed in any manner as to impose upon the Association or the Developer, their successors and assigns, any liability whatsoever, for property damage and/or personal injury occurring to any person or persons whomsoever, or by reason of any use of any common areas or roads depicted on the

recorded Plot. Any and all persons using such roads, common areas, easements, or all of them, shall do so at their own risk and without any liability whatsoever on the part of the Association, the Developer or their respective successors and assigns, as the case may be.

IN WITNESS WHEREOF, GULFSTREAM DEVELOPMENT LLC LLC, a LIMITED LIABILITY Corporation of the State of Delaware, the Developer, has caused this Instrument to be executed by its proper corporate officers and its corporate seal to be hereunto affixed, the day and year first above written.

Gulfstream Development LLC LLC.

By: _____
MANAGING MEMBER

Attest: _____

STATE OF DELAWARE)
) SS.
COUNTY OF SUSSEX)

BE IT REMEMBERED, That on this _____ day of _____, 2016, personally came before me, the subscriber, a Notary Public for the State and County aforesaid, Robert J. Harris, Jr., President of GULFSTREAM DEVELOPMENT LLC LLC, a LLC corporation of the State of Delaware, party to this Indenture, known to me personally to be such and acknowledged this Indenture to be his act and deed and the act and deed of said corporation; that the signature of the President is in his own proper handwriting; that the seal affixed is the common and corporate seal of said corporation duly affixed by its authority; and that the act of signing, sealing, acknowledging and delivering said Indenture was first duly authorized by a resolution of the Board of Directors of said corporation.

GIVEN under my Hand and Seal of Office the day and year aforesaid.

Notary Public

Notary Name (print)

My Commission Expires: _____

EXHIBIT A

DRAFT

DRAFT
PUBLIC OFFERING STATEMENT
AS TO
GOOD WILL FARM SUBDIVISION
SITUATED IN
BALTIMORE HUNDRED,
SUSSEX COUNTY, DELAWARE, PURSUANT
TO THE DELAWARE UNIFORM COMMON INTEREST UNIT OWNERSHIP
ACT

PUBLIC OFFERING STATEMENT
GOOD WILL FARM SUBDIVISION

THE NARRATIVE SECTIONS OF THIS PUBLIC OFFERING STATEMENT DO NOT REPEAT OR CONTAIN ALL THE INFORMATION APPEARING IN THE DOCUMENTS AND OTHER MATERIALS REPRODUCED AS EXHIBITS TO THIS PUBLIC OFFERING STATEMENT. IN MANY CASES, THESE SECTIONS CONTAIN ABSTRACTS OR SUMMARIES OF INFORMATION FROM THE EXHIBITS. ACCORDINGLY, IN NO CASE SHOULD ANY OF THE INFORMATION SET FORTH IN THE NARRATIVE SECTIONS OF THIS PUBLIC OFFERING STATEMENT BE CONSTRUED TO SUBSTITUTE FOR, ALTER, MODIFY OR ABROGATE, IN WHOLE OR IN PART, ANY OF THE TERMS, CONDITIONS OR PROVISIONS OF ANY OF THE DOCUMENTS AND OTHER MATERIALS REPRODUCED AS EXHIBITS TO THIS PUBLIC OFFERING STATEMENT.

This Public Offering Statement consists of two (2) parts, a narrative portion and an exhibit portion. The narrative portion is intended to summarize certain significant features of the Planned Community and also to present other information of interest to a prospective purchaser of a Unit. This Public Offering Statement contains information required to be furnished to purchasers of residential Units under the Delaware Uniform Common Interest Ownership Act, 25 Del. C. Sections 81-101 through 81-421 (hereinafter referred to, as amended from time to time, the “Act”). The exhibits include copies of the legal documents that are required for the creation and operation of the Planned Community and for the purchase of Units within the Planned Community. If there is any inconsistency between any exhibit and the narrative, such exhibit will govern. All of Declarant’s and any Dealer’s sales agents and other representatives are prohibited from changing, and lack legal authority to alter or modify, any of the terms and conditions of the legal documents, or attempting to interpret their legal effect, or making any promises about the features of the Planned Community.

1. Definitions. The terms used in this Public Offering Statement and in the Declaration and Bylaws shall have the following meanings:

A. “Good Will Farm Architectural Review Committee (GWARC)” means Good Will Farm Subdivision Architectural Committee, which has jurisdiction over design and development guidelines in the Planned Community Pursuant to Article VI, Section 6 of the Declaration.

B. “Association” means all of the Unit (Home) Owners acting as a group in accordance with the Bylaws, which shall be incorporated as “GOOD WILL FARM HOMEOWNERS ASSOCIATION, INC.”, a Delaware non-profit corporation.

C. “Buildings” means the residential structures to be constructed and intended to be used for residential purposes (including leasing of Units for residential purposes) or for any other lawful purpose or for any combination of such uses.

D. “Bylaws” means such governing regulations as are adopted pursuant to the Act for the regulation and management of the Property, including such amendments thereof as may be adopted from time to time, a copy of which is attached hereto at Schedule “C” as Recorded in Deed Book _____, Page _____.

E. “Common Elements” means and includes the definition thereof as set forth in Section 81-103(8) of the Act and as defined in this Declaration. Specifically, it includes the Pool and Pool house, the private interior streets, Private Open Space and Forested Buffer Areas as shown on the Record Plan, all improvements, subject to any public utility easements now of record or to be given in the future either by the Declarant or the Board of Directors for sanitary and storm sewer use, water line, electric, telephone and cable television transmission lines and sewage lift stations or other similar necessary or desirable utility functions and subject to any conservation easements now of record or to be given in the future either by the Declarant or the Board of Directors.

F. “Common Expenses” means and includes:

(1) All sums lawfully assessed against the Unit Owners by the Board of Directors.

(2) Expenses of administration, maintenance, repair, snow and ice removal from common walkways and maintenance of the Common Elements, including repair and replacement reserves as may be established.

(3) Maintenance of landscaping and provisions for landscaping common element land, including, but not limited to, mowing, as determined by the Board of Directors.

(4) Expenses agreed upon as Common Expenses by the Unit Owners;

(5) Expenses declared Common Expenses by the provisions of the Act, by this Declaration, or the Bylaws;

(6) Premiums for insurance policies required to be purchased by the Board of Directors pursuant to the Bylaws; and

(7) All valid charges against the Planned Community as a whole.

G. “Dealer” means any party who, in the regular course of business, purchases a Unit in the Planned Community solely for the purpose of constructing improvements upon such Unit for resale or rental.

H. “Declarant” means Gulfstream Development LLC, a Delaware limited Liability Company, and its successors or assigns.

I. “Declaration” means the document by which the Declarant of the Property submits the Property to the provisions of the Act, and all amendments thereof. A copy is attached hereto as Schedule “D” as Recorded in Deed Book _____, Page _____.

J. “Board of Directors” means a board of natural persons of the number stated in the Bylaws, all of whom shall be Unit Owners as defined herein, who shall be elected by the Unit Owners, and who shall manage the business operations and affairs of the Property on behalf of the Unit Owners and in compliance with and subject to the provisions of the Act, the Declaration, the Bylaws, and such other rules and regulations as may be promulgated. “Board of Directors” shall be the name for the board of directors of the Association and shall be composed of the same individuals.

K. “Land” means real property, exclusive of buildings or other improvements thereon, as described in Schedule “A” attached hereto.

L. “Majority” or “Majority of Unit Owners” means the owners of more than fifty percent (50%) of the aggregated interest of the Units to be constructed.

M. “Managing Agent” means a professional managing agent employed by the Declarant or Board of Directors to perform such duties and services as the Declarant or Board of Directors shall authorize in conformance with the Declaration and the Bylaws.

N. “Planned Community” means the Land and the buildings and all other improvements and structures to be constructed thereon owned in fee simple, and all easements, rights and appurtenances belonging thereto which have been or are intended to be submitted to the provisions of the Act.

O. “Record Plan” means the Record Plan For “GOOD WILL FARM” prepared by _____, dated _____ and recorded in the Office of the Recorder of Deeds in and for Sussex County, Delaware on _____ in Plat Book ___. Page ___, as may hereafter be amended (the “Record Plan”), a copy of which is attached hereto as Schedule “B”.

P. “Recorded” means that an instrument has been duly entered of record in the Recorder’s Office.

Q. “Recorder” means the Office of the Recorder of Deeds, in and for Sussex County, Delaware, located in Georgetown, Delaware.

R. “Rules and Regulations” means such rules and regulations as may be adopted from time to time by the Declarant or Board of Directors in accordance with Section 81-320 of the Act that are deemed necessary for the enjoyment of the Planned Community, provided they are not in conflict with the Act, the Declaration, or the Bylaws.

S. “Unit” means a legally subdivided unit on the Land established pursuant to the Record Plan improved with or to be improved with a single family detached residential home or a townhome, as further defined by Section 81-103 (48) of the Act.

T. “Unit Designation” means the number, letter or combination thereof designating a Unit on the Record Plan.

U. “Unit Owner” means any natural person, corporation, partnership, association, trust or other legal entity or any combination thereof which owns title to a Unit.

2. Name and Address of Declarant: Gulfstream Development LLC, of 27 Atlantic Avenue Ocean View, Delaware 19970.

3. General Description of Common Interest Community. Declarant, as owner of legal title to the Land herein described, has submitted the Land to the provisions of the Act, in order to create a Planned Community. The Land currently consists of 103 single family residential building units, Pool and Poolhouse, the private interior streets, Private Open Space and **Forested Buffer Areas** to be owned by GOOD WILL FARM Homeowners Association, Inc., all as shown and identified on the Record Plan. The Planned Community will contain at least 103 detached single-family homes in various configurations to be determined by Dealer. The amenities in the Planned Community will consist of a swimming pool and pool house as listed on the Record Plan.

4. Construction Schedule. Declarant shall be responsible for the physical construction and completion of the land improvements in accordance with approved Construction Plans by Sussex County. Declarant commenced construction of the land improvements (site construction) on or about January 1, 2020, currently anticipated to be completed by December 31, 2025 except for Stormwater Management Pond and final street paving. The residential homes will be constructed by a _____ Current plans are to complete the site construction and to commence construction of the homes upon execution of sales contracts for the purchase of such homes. Home construction is currently contemplated to take approximately from two to six months each. Notwithstanding the above, Declarant and Dealer each reserves the right to change the foregoing schedule in its sole subjective and absolute discretion as dictated by market conditions and the execution of contracts for sale of homes.

5. Balance Sheet and Budget. Attached to this Public Offering Statement as Schedule "E" is a current balance sheet and either (a) a projected budget for the Association for the one-year period following the date of the first anticipated conveyance of a Unit to a purchaser, or (b), if more than one year after the first conveyance of a Unit to a purchaser, the current budget of the Association. The Declarant prepared the budget. A statement of the material assumptions with respect to the budget, including those concerning occupancy and inflation factors, is included in the footnotes to the budget. Except for the payment of Common Expense assessments as provided herein and the initial contribution described below, it is not anticipated that Unit Owners will be required to pay fees or charges for the use of Common Elements. All current or expected fees or charges to be paid by Unit Owners for the use of the Common Elements and other facilities related to the Planned Community are contained in the budget attached hereto.

Unit Owners will be assessed to obtain the funds necessary to meet the budget of the Association. It is anticipated that annual assessments will be established prior to the beginning of each fiscal year and will be payable on a monthly, quarterly, or annual basis as the Board of Directors may decide.

With respect to Association assessments, the amount assessed against each Unit will be based on the percentage interest in the Planned Community assigned to the Unit. Each Unit

Owner will be responsible for payment of that percentage of the total annual budget that is equal to the percentage interest of such Unit Owner's Unit.

All figures and other information set forth in the estimated budget attached hereto as Schedule "E", including, but not limited to, the estimated Common Expenses, income and assessments, and any repair and reserve contributions, are based upon similar projects and as provided in the Act, and shall not be deemed to be part of any Sales Agreement, or to constitute the basis of the bargain, between Declarant or Dealer and any Unit purchaser, nor shall such budget figures or other information be deemed to give rise to or constitute any representation or warranty whatsoever, whether express or implied, regarding the level of assessments or any other matter. THE BUDGET FIGURES ARE, OF COURSE, GOOD FAITH ESTIMATES AND NEITHER DECLARANT NOR ANY DEALER OR OTHER PERSON OR ENTITY CAN BE CERTAIN THAT SUFFICIENT FUNDS HAVE BEEN BUDGETED TO COVER ALL COMMON EXPENSES THAT MAY BE INCURRED. Because actual expenditures may differ from estimated expenditures, due to possible changes in the future expenses of the Planned Community and other variable factors, such estimates are not intended nor shall they be considered as guarantees of any kind whatsoever.

6. Initial Contribution. In addition to the regular annual assessments and the normal and customary closing expenses, each purchaser will be required to make, at settlement on such purchaser's Unit, an initial non-refundable contribution to the Association of \$750.00. This contribution will provide the Association with a fund to enable it to fund its operating budget maintain reserves for operations and maintain capital reserves for future capital expenses. Such funds may be used for certain prepaid items, including, but not limited to, insurance, initial equipment and supplies, organizational costs and other start-up costs, or for such other purposes as the Board of Directors may determine. The initial capital contribution to the Association is not an escrow or advance, is not refundable and is not required to be paid by subsequent purchasers on the resale of Units. The contribution was calculated based on the Managing Agent's estimate of what amounts will be needed for the initial operation of the Association.

7. Significant Features of Declaration. The Declarant has executed and Recorded a Declaration, a copy of which Declaration is attached to this Public Offering Statement as Schedule "D". The Declaration contains, among other provisions, sections (a) describing the Units and Common Elements, (b) setting forth the powers of the Association, (c) describing the ownership of utilities, (d) granting Unit Owners rights in Common Elements, (e) granting certain easements, (f) establishing the powers, duties and membership of the Architectural Board, (g) establishing certain use restrictions on Units, (h) reserving certain Declarant rights, and (i) prohibiting time shares and leases for less than 30 days.

8. Significant Features of Bylaws. The affairs of the Planned Community will be conducted in accordance with the Bylaws. A recorded copy of the Bylaws of the Planned Community is attached to this Public Offering Statement as Schedule "C". The Bylaws contain, among other provisions, sections (a) describing the workings of the Association and the Board of Directors, (b) setting forth detailed guidelines for the operation of the Planned Community, (c) setting forth the percentage interests of the Units, which determine the Unit Owners' relative shares of ownership of the Common Elements and their responsibility for Common Expenses, (d) setting forth the voting rights applicable to each Unit, (e) establishing the officers of the

Association and their powers, and (f) setting forth procedures for establishing and collecting assessments against Units and Unit Owners.

9. Rules and Regulations. Certain restrictions governing the use of the Units and Common Elements and governing the maintenance, repair, replacement and architectural control of the Units and Common Elements are stated in the Declaration and Bylaws. In addition, the Bylaws authorize the Board of Directors to promulgate Rules and Regulations for the use of the Units and Common Elements. No such rules and regulations have been adopted at this time.

10. Other Recorded Covenants and Restrictions. A brief narrative description (the "Narrative Descriptions") of certain additional recorded covenants, conditions, restrictions and reservations (collectively, the "Other Recorded Covenants") that affect the Planned Community can be found on Schedule "F". The brief Narrative Descriptions of the Other Recorded Covenants contained on Schedule "F" are for general disclosure purposes only, do not repeat or contain all of the information contained in the Other Recorded Covenants, and are not a substitute for the Other Recorded Covenants.

11. Contracts and Leases Subject to Cancellation Under Section 81-305 of the Act. There are no contracts or leases of a material nature to the Planned Community that will or may be subject to cancellation by the Association following the termination of the period of Declarant control.

12. Sales Program. The obligations of the parties in connection with the purchase of a Unit are stated in detail in the sample Sales Agreement, a copy of which is attached to this Public Offering Statement as Schedule "G". Purchasers are advised that the terms of any Sales Agreement duly executed by Declarant and any Unit purchaser shall control over any conflicting provisions in the form of Sales Agreement attached hereto. Offering prices for all Units are established by Declarant and are subject to change at Declarant's discretion without notice. Additionally, Declarant and a purchaser may negotiate additional terms and conditions with regard to the sale and purchase of a Unit. It is not currently anticipated that purchasers will be required to execute any other contracts or leases with respect to the Property or the Planned Community.

13. State of Title. The Land is subject to recorded Mortgages in favor of ACTA LLC, which Mortgages will be released at the time of transfer of title of a Unit from Declarant to Dealer. Declarant or Dealer will convey to the purchaser of each Unit, in fee simple, insurable title, free and clear of all of Declarant's financing encumbrances, including any mechanics' liens for work performed by Declarant's contractors. Accordingly, purchasers will receive title free of any such lien that may be enforced against the Unit for secured debt created or assumed by Declarant. However, easements and other matters of records are noted in Section 10 above.

14. Warranties. Declarant makes no representations or warranties of any type with respect to the Units being conveyed, or the construction of dwellings thereon except for (A) the express written warranties contained in the sales agreement executed with Unit Owners, or the warranty documents delivered to Unit Owners at closing, the present copies of which are attached hereto as Schedule "H"; and (b) the warranties covered by the Act.

THESE ARE THE ONLY WARRANTIES THAT WILL BE GIVEN WITH RESPECT TO THE UNIT, COMMON ELEMENTS AND PLANNED COMMUNITY. TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE DECLARANT AND DEALER DISCLAIM ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, APPLICABLE TO THE UNIT, COMMON ELEMENTS AND PLANNED COMMUNITY.

15. Financing Offered or Arranged by Declarant. There is no temporary or permanent financing being offered by the Declarant for purchase of Units by Unit Owners.

16. Judgments or Pending Suits Against Association. There are not any unsatisfied Judgments or pending lawsuits against the Association.

17. Deposits. With respect to any Monetary Deposits tendered by a Unit Owner to Dealer pursuant to an Agreement of Sale, the Deposit shall be held by Dealer in accordance with the terms of that Agreement.

18. Restraints on Alienation. There are no restraints on alienation of any portion of the Common Interest Community including the Units and the amount for which a Unit may be sold or on the amount that may be received from a Unit Owner on sale, condemnation or casualty loss to the Unit or to the Common Interest Community, or on termination of the Common Interest Community; except that a Unit may not be conveyed pursuant to a time-sharing agreement described in Section 81-103(47) of the Act or leased or rented for a term of less than 30 days.

19. Insurance. The Association shall maintain insurance coverage as required by the Declaration and Bylaws.

20. Residential Use. All Units to be constructed will be restricted exclusively to residential use as provided by the Record Plan, the Declaration and the Bylaws.

21. Development Rights. The Declarant retains (a) all required development rights in order to complete the installation of the Land improvements as required by the Record Plan, the approved construction plans and by the Development Agreements by and between Declarant and the applicable governmental authorities; and (b) the special declarant rights set forth in Section 26 of the Declaration.

22. Location of Homes. All residential dwelling units shall be constructed on the Land at the location as required by the Record Plan.

23. Restrictions on Use, Occupancy and Alienation. All restrictions as contained in the Declaration affecting use, occupancy and alienation of units will apply to any Units created pursuant to any development right which may be reserved by the Declarant.

IN WITNESS WHEREOF, Gulfstream Development LLC, has caused these presents to be signed by its Manager this ____ day of _____ 2016.

**Gulfstream Development LLC, a
Delaware limited liability company**

By: Robert J. Harris, Jr., as Manager

Witness

By: _____(SEAL)

DRAFT

PLANNING & ZONING COMMISSION

ROBERT C. WHEATLEY, CHAIRMAN
KIM HOEY STEVENSON, VICE-CHAIRMAN
DOUGLAS B. HUDSON
R. KELLER HOPKINS
HOLLY J. WINGATE



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 January 24, 2019

Application: CU 2155 Stockley Materials, LLC

Applicant/ Owner: Stockley Materials, LLC
25136 DuPont Blvd
Georgetown, DE 19947

Site Location: Southwest side of Seashore Highway, approximately 0.72 miles southeast of Gravelly Branch Road.

Current Zoning: AR-1 (Agricultural Residential District)

Proposed Use: Borrow Pit

Comprehensive Land Use Plan Reference: Highway Commercial and Low Density Areas

Councilmatic District: Mr. Wilson

School District: Indian River School District

Fire District: Seaford Fire District

Sewer: None

Water: None

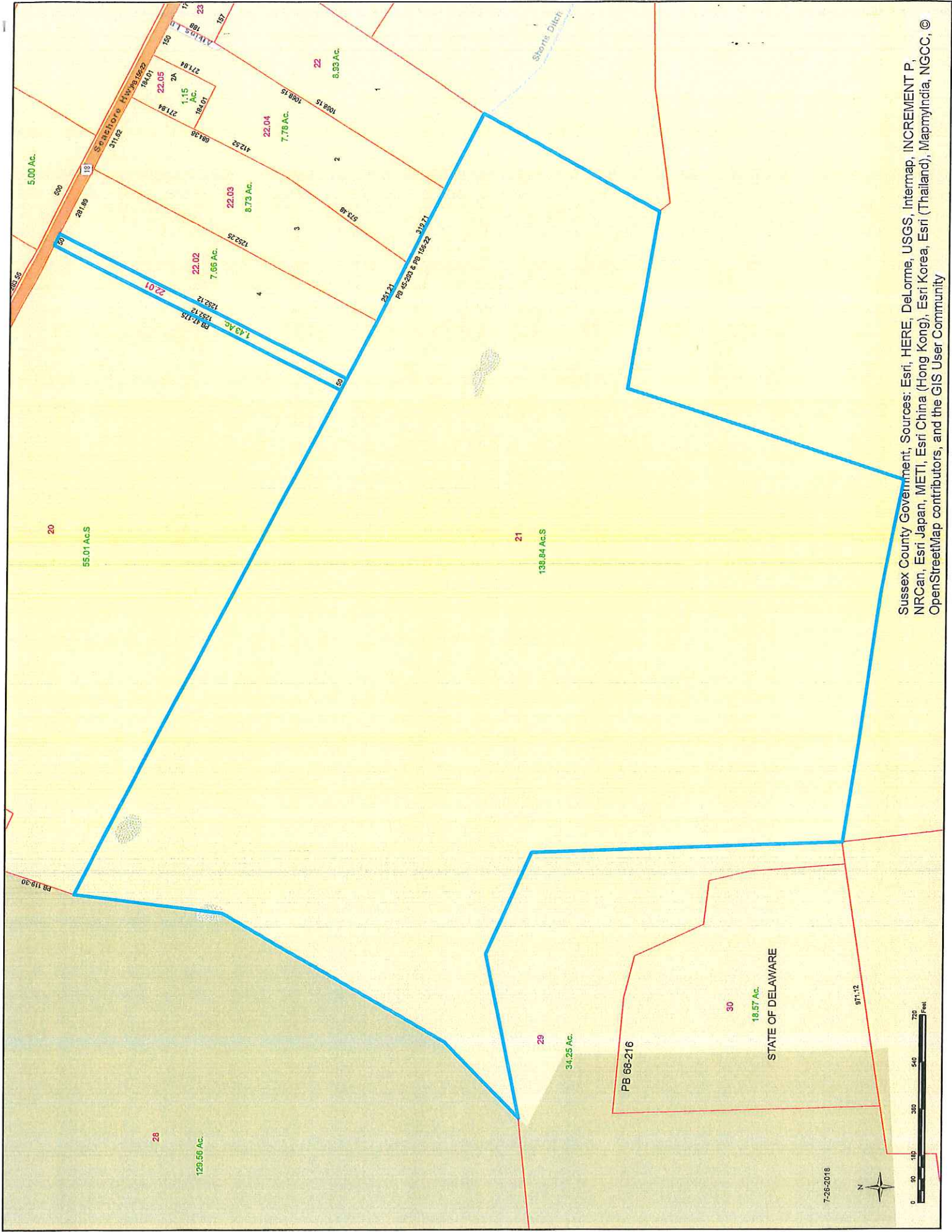
Site Area: 158.74 ac. +/-

Tax Map ID.: 231-6.00-21.00 & 22.01





Sussex County Government, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Sussex County Government, Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

7-26-2016



STATE OF DELAWARE

PB 66-216

29
34.25 Ac.

30
18.57 Ac.

20
55.01 Ac.S

21
138.84 Ac.S

28
129.56 Ac.

22.02
7.66 Ac.

22.03
8.73 Ac.

22.04
7.78 Ac.

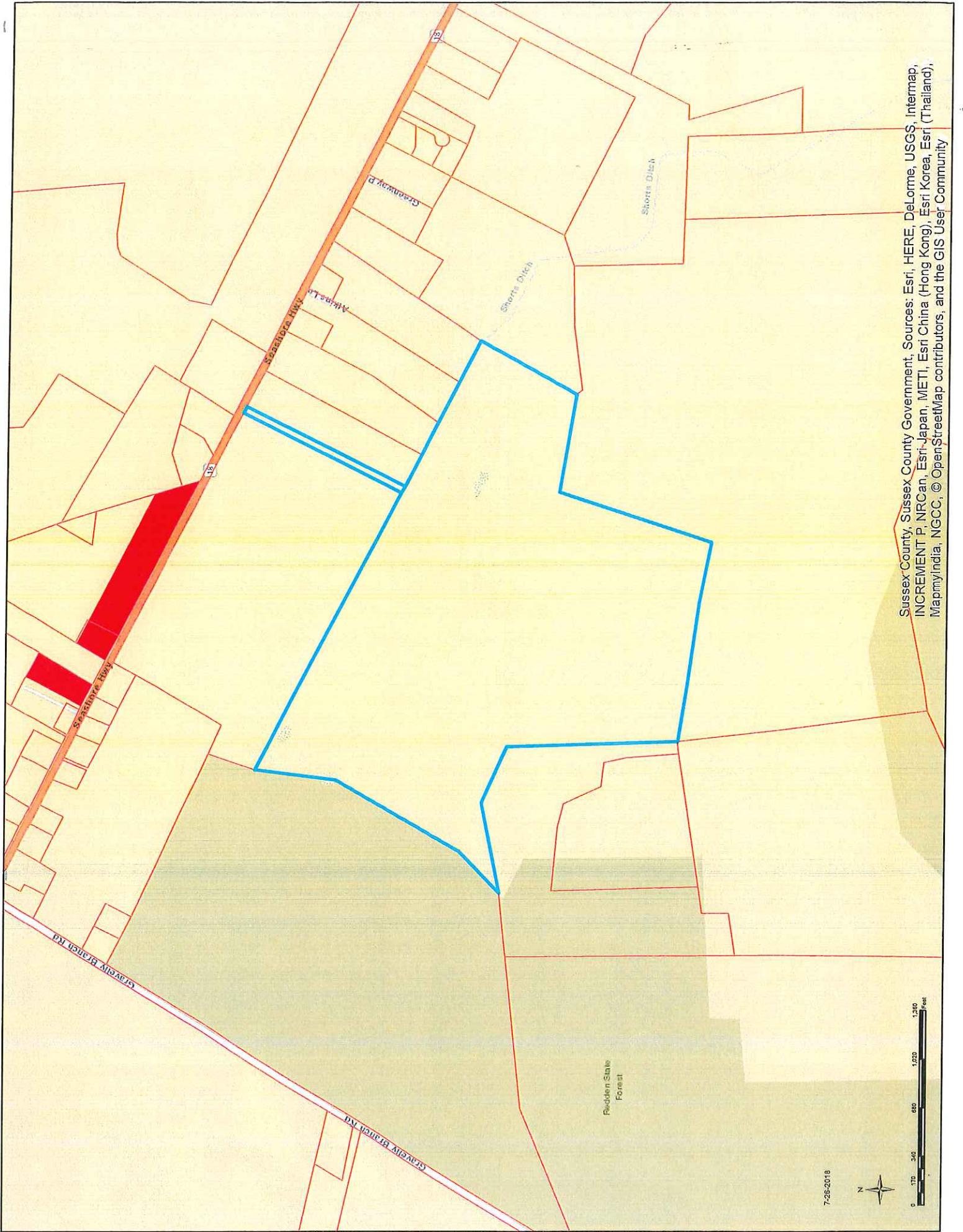
22
8.93 Ac.

22.01
1.43 Ac.

22.05
1.15 Ac.

5.00 Ac.

Sports District



Sussex County, Sussex County Government, Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri-Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

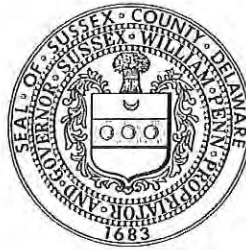
7-26-2018



PLANNING & ZONING

JANELLE M. CORNWELL, AICP
DIRECTOR

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



Sussex County

DELAWARE
sussexcountyde.gov

Memorandum

To: Sussex County Planning Commission Members
From: Janelle Cornwell, AICP, Planning & Zoning Director
CC: Vince Robertson, Assistant County Attorney and applicant
Date: January 17, 2019
RE: Staff Analysis for CU 2155 Stockley Materials, LLC

This memo is to provide background and analysis for the Planning Commission to consider as a part of application CU 2155 Stockley Materials, LLC to be reviewed during the January 24, 2019 Planning Commission Meeting. This analysis should be included in the record of this application and is subject to comments and information that may be presented during the public hearing.

The request is for a Conditional Use for parcels 231-6.00-21.00 & 22.01 to allow for a borrow pit to be located on Seashore Hwy. (Rt. 18). The size of the properties is 158.74 ac. +/-.

The 2008 Sussex County Comprehensive Plan Update (Comprehensive Plan) provides a framework of how land is to be developed. As part of the Comprehensive Plan a Future Land Use Map is included to help determine how land should be zoned to ensure responsible development. The Future Land Use map indicates that the properties have the land use designations of Low Density Areas with a small portion along Seashore Hwy. designated as Highway Commercial.

The surrounding land use to the north is Highway Commercial and Low Density Areas. The land uses to the south, east and west are Low Density. The Low Density Areas land use designation recognizes that the primary uses are agriculture and single family detached homes and that a business development should be largely confined to businesses that address the needs of single family residences and agriculture. It should also permit industrial uses that support or depend on agricultural uses. The focus of retail and office should provide convenience goods and services to nearby residents and should be limited in their location, size and hours of operation. The use as auto repair and gasoline sales, should be avoided in these areas. The Highway Commercial Areas recognizes that these areas include concentrations of retail and services uses near highways and that the commercial uses should be geared towards vehicular traffic.

The property is zoned AR-1 (Agricultural Residential District). The properties to the north, south, east and west are zoned AR-1 (Agricultural Residential District). There are a few parcels across Seashore Hwy. zoned C-1 (General Commercial District). There is a Conditional Uses in the area (CU 1094 warehousing, storage, and fertilizer sales).

Based on the analysis of the land use, surrounding zoning and uses, the Conditional Use for a borrow pit could be considered consistent with the land use, area zoning and uses.





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

JENNIFER COHAN
SECRETARY

May 30, 2018

Ms. Janelle Cornwell, Director
Sussex County Planning & Zoning
P.O. Box 417
Georgetown, DE 19947

Dear Ms. Cornwell:

The Department has completed its review of a Service Level Evaluation Request for the **Mr. Ken Adams (Stockley Materials, LLC)** conditional use application, which we received on May 3, 2018. This application is for a 140.27-acre assemblage of parcels (Tax Parcels: 231-6.00-21.00 & 22.01). The subject land is located on the southwest side of Delaware Route 18, approximately $\frac{3}{4}$ of a mile southeast of the intersection of Delaware Route 18 and Gravelly Branch Road / Wilson Road (Sussex Road 527). The subject land is currently zoned as AR-1(Agricultural Residential), and the applicant is seeking a conditional use approval to operate a borrow pit.

Per the 2017 Delaware Vehicle Volume Summary, the average daily traffic volumes on average day and on an average summer day along the segment of Delaware Route 18 where the subject land is located, which is from Coverdale Road / Chaplins Chapel Road (Sussex Road 42) to Cokesbury Road (Sussex Road 51), are 9,839 and 12,652 vehicles per day, respectively.

Based on our review, we estimate that the proposed land use will generate fewer than 50 vehicle trips in any hour and fewer than 500 vehicle trips per day. These numbers of trips are DelDOT's minimum warrants for determining that a Traffic Impact Study (TIS) should be required for a particular development. Because the proposed land use would not meet these warrants, we consider the development's traffic impact to be negligible and we do not recommend that the applicant be required to perform a TIS for the subject application. DelDOT's description of this application as negligible with regard to warranting a TIS does not mean that it is negligible in other respects. We recommend that the applicant not be required to perform a TIS for the subject application.

Ms. Janelle M. Cornwell

Page 2 of 2

May 30, 2018

Please contact Mr. Claudy Joinville, at (302) 760-2124, if you have questions concerning this correspondence.

Sincerely,



T. William Brockenbrough, Jr.
County Coordinator
Development Coordination

TWB:cjm

cc: Constance C. Holland, Coordinator, Cabinet Committee on State Planning Issues
Mr. Ken Adams (Stockley Materials, LLC), Applicant
J. Marc Coté, Assistant Director, Development Coordination
Gemez Norwood, South District Public Works Manager, Maintenance and Operations
Steven Sisson, Sussex County Subdivision Coordinator, Development Coordination
Derek Sapp, Subdivision Manager, Development Coordination
Susanne Laws, Subdivision Manager, Development Coordination
Troy Brestel, Project Engineer, Development Coordination
Claudy Joinville, Project Engineer, Development Coordination

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

TO: **Janelle Cornwell**

REVIEWER: **Chris Calio**

DATE: **1/4/2019**

APPLICATION: **CU 2155 Stockley Materials, LLC**

APPLICANT: **Stockley Materials, LLC**

FILE NO: **WSPA-5.02**

TAX MAP &
PARCEL(S): **231-6.00-21.00 & 22.01**

LOCATION: **Southwest side of Seashore Highway, approximately 0.72
miles southeast of Gravelly Branch Road**

NO. OF UNITS: **Borrow Pit**

GROSS
ACREAGE: **158.74**

RECEIVED
JAN 07 2019
SUSSEX COUNTY
PLANNING & ZONING

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

SEWER:

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

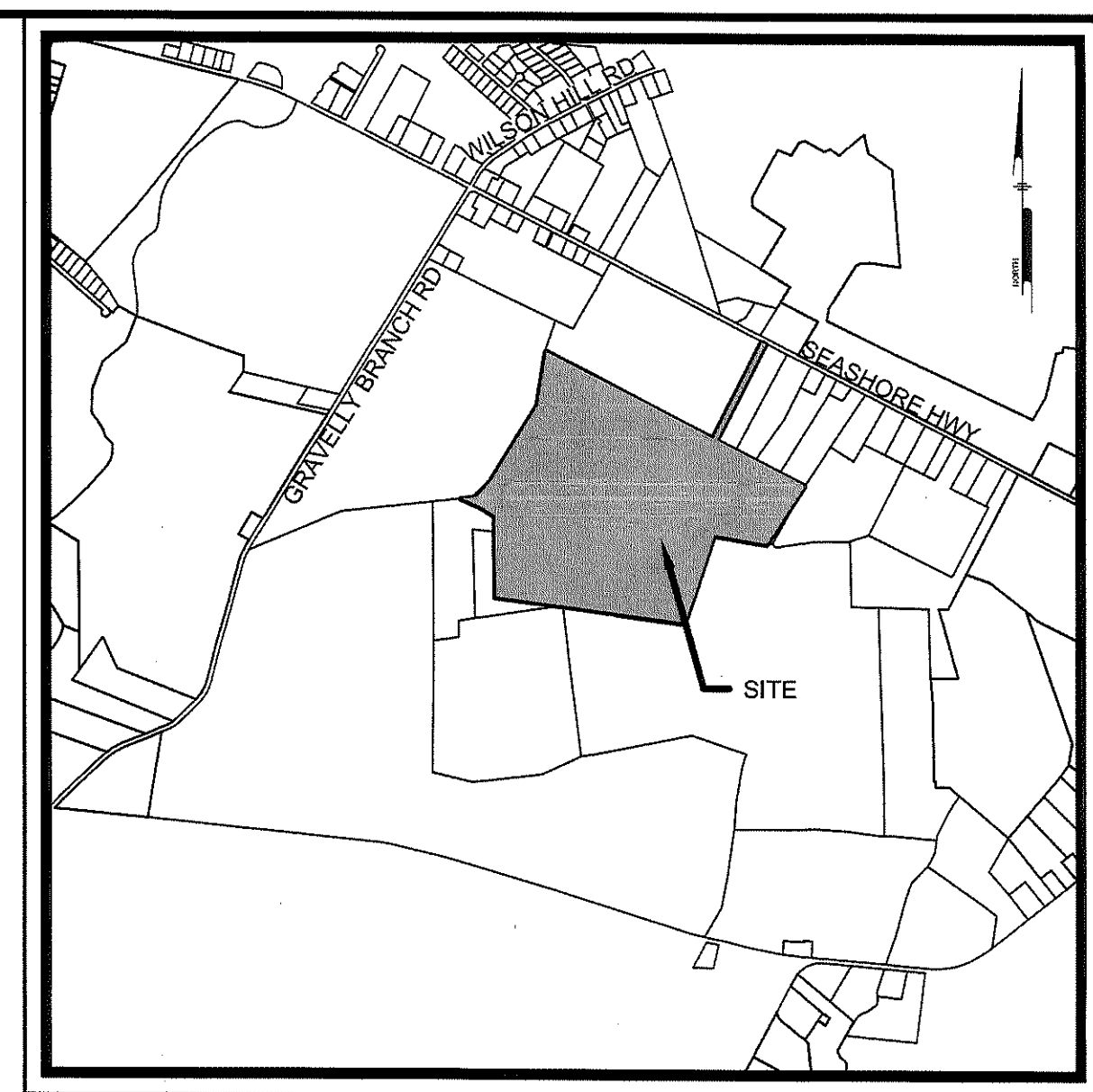
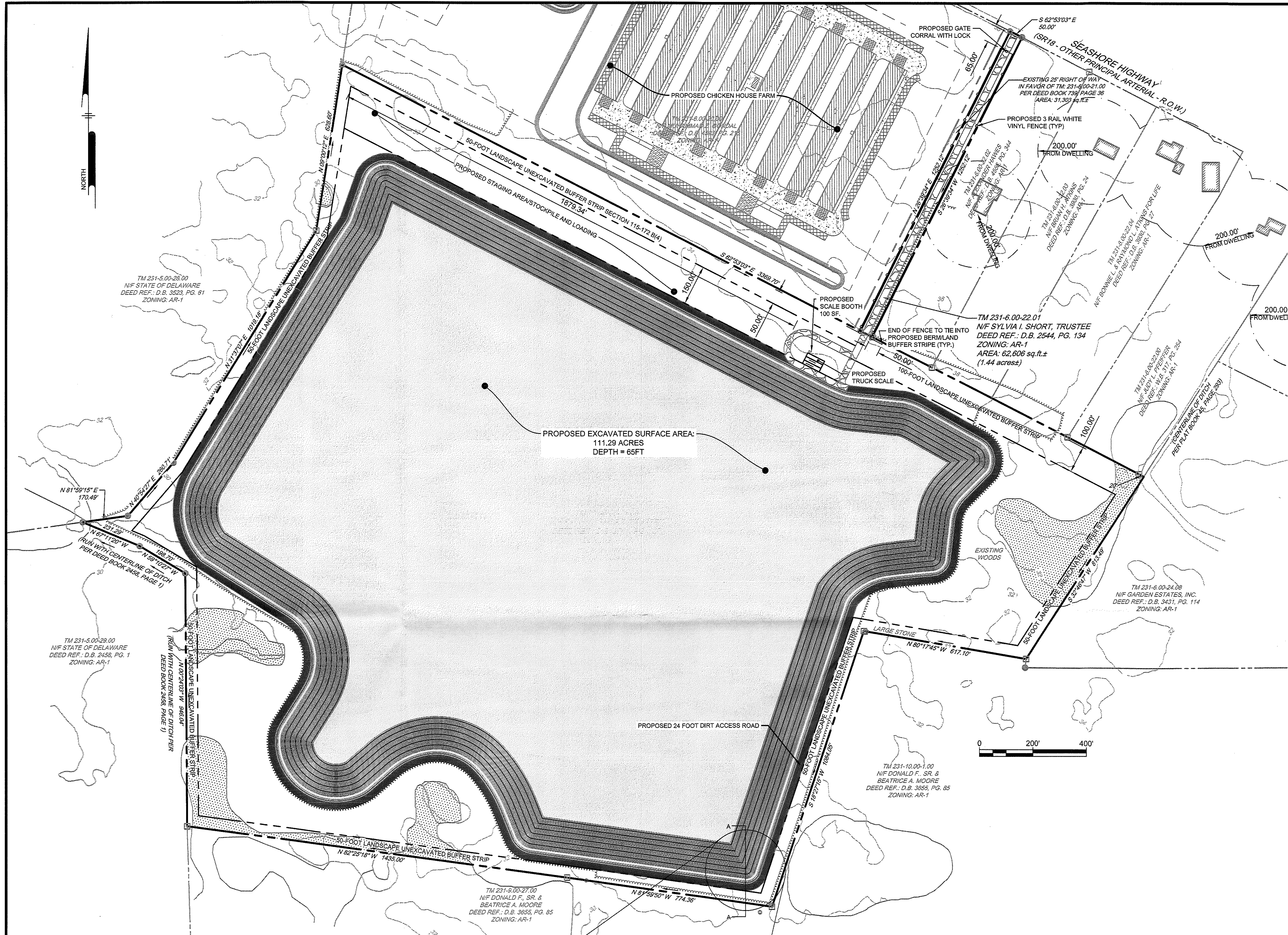
- (6). Is the project capable of being annexed into a Sussex County sanitary sewer district? **N/A**
- Attached is a copy of the Policy for Extending District Boundaries in a Sussex County Water and/or Sanitary Sewer District.
- (7). Is project adjacent to the Unified Sewer District? **N/A**
- (8). Comments: The proposed Conditional Use is not in an area where the Sussex County Engineering Department has a plan or 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.
Jayne Dickerson
No Permit Tech Assigned



LOCATION MAP
Scale: 1" = 2000'

SITE DATA:

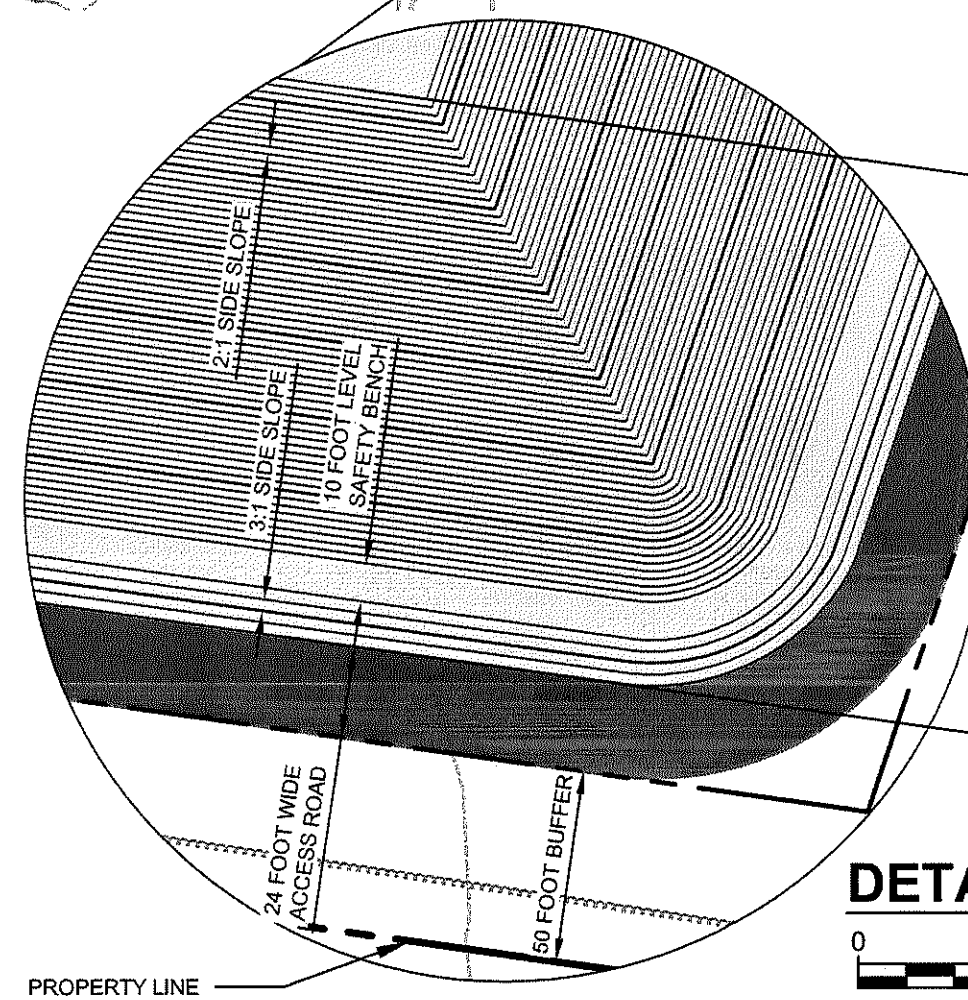
1. TAX MAP NUMBER:	231-6.00-21.00, 231-6.00-22.01
2. DEVELOPER NAME:	M.L. JOSEPH SANDS & GRAVEL, INC. 25136 DUPONT BOULEVARD GEORGETOWN, DE 19847
3. TOWN/HUNDRED/COUNTY:	GEORGETOWN / NANICOCK HUNDRED / SUSSEX
4. CURRENT ZONING:	AR-1 AGRICULTURAL RESIDENTIAL
5. PROPOSED ZONING:	AR-1/CONDITIONAL USE
6. PRESENT USE:	TILLED CROPS
7. PROPOSED USE:	BORROW PIT, SECTION 115-172-(B)
8. SPEED LIMIT:	50 MPH
9. STATE INVESTMENT AREA:	LEVEL 4
10. SITE AREA AND ACREAGE:	
BORROW PIT:	PR=111.3 AC ± EX=0.0 AC ±
WETLANDS:	PR=6.7 AC ± EX=6.7 AC ±
WOODS:	PR=13.1 AC ± EX=28.6 AC ±
ROADS:	PR=6.0 AC ± EX=0.0 AC ±
ROADS:	PR=12.3 AC ± EX=0.0 AC ±
BUFFER:	PR=7.2 AC ± EX=0.0 AC ±
STAGING AREA:	PR=1.9 AC ± EX=123.4 AC ±
OPEN SPACE:	PR=158.7 AC ± EX=158.7 AC ±
TOTAL:	
11. LATITUDE AND LONGITUDE STATE PLAN COORDINATES:	LONGITUDE: W-75°30'16.9041" LATITUDE: N 38°41'41.0872"

GENERAL NOTES:

- ELEVATIONS ARE BASED ON NAVD 88, AND DE STATE PLANE COORDINATE SYSTEM NAD 83 HORIZONTAL DATUM. THE BOUNDARY INFORMATION SHOWN ON THIS PLAN WAS COMPILED FROM DOCUMENTS OF PUBLIC RECORD AND AN ACTUAL FIELD SURVEY BY PENNONI ASSOCIATES, L.L.C., DATED APRIL 2017. ALL PROVIDED EASEMENTS ARE SHOWN ON THIS PLAN, HOWEVER, THIS PLAN AND SURVEY DOES NOT VERIFY THE EXISTENCE OR NON-EXISTENCE OF RIGHT-OF-WAYS OR EASEMENTS.
- UNLESS SPECIFICALLY STATED OR SHOWN HEREON TO THE CONTRARY, THIS SURVEY IS MADE SUBJECT TO AND DOES NOT LOCATE OR DELINEATE:
 - RIGHTS OR INTEREST OF THE UNITED STATES OF AMERICA OR STATE OF DELAWARE OVER LANDS NOW OR FORMERLY FLOWED BY TIDEWATER, BUT NO LONGER VISIBLE OR PHYSICALLY EVIDENT, OR LANDS CONTAINING ANY ANIMAL, MARINE OR BOTANICAL SPECIES REGULATED BY OR UNDER THE JURISDICTION OF ANY FEDERAL, STATE, OR LOCAL AGENCY.
 - BUILDING SETBACK LINES, ZONING REGULATIONS OR LINES ESTABLISHED BY ANY FEDERAL, STATE OR LOCAL AGENCY WHICH MAY AFFECT THE BUILDING OR DEVELOPMENT POTENTIAL OF THE SUBJECT PROPERTY.
 - ANY SUBSURFACE OR SUBTERRANEAN CONDITION, EASEMENTS OR RIGHTS, INCLUDING, BUT NOT LIMITED TO MINERAL OR MINING RIGHTS, OR THE LOCATION OF OR RIGHTS TO ANY SUBSURFACE STRUCTURES, CONTAINERS OR FACILITIES OR ANY OTHER NATURAL OR MAN-MADE SUBSURFACE CONDITION WHICH MAY OR MAY NOT AFFECT THE USE OR DEVELOPMENT POTENTIAL OF THE SUBJECT PROPERTY.
- UTILITY NOTES:
 - THE LOCATION OF THE EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN HAVE BEEN TAKEN FROM EXISTING UTILITY RECORDS AVAILABLE AT THE TIME THESE PLANS WERE PREPARED AND FROM SURFACE OBSERVATION OF THE SITE. LOCATIONS OF UTILITIES AS SHOWN AND MAY OR MAY NOT BE COMPLETE, THE NATURE AND EXACT LOCATION OF EXISTING UTILITIES SHOULD BE VERIFIED PRIOR TO INITIATING ANY ACTIVITY THAT MAY AFFECT THEIR USE OR LOCATION.
 - COMPLETENESS OR ACCURACY OF LOCATION AND DEPTH OF UNDERGROUND UTILITIES AND STRUCTURES IS NOT GUARANTEED.
 - MISS UTILITY SHALL BE NOTIFIED THREE (3) DAYS PRIOR TO EXCAVATION.
 - THE CONTRACTORS SHALL VERIFY LOCATIONS AND DEPTHS OF ALL UNDERGROUND UTILITIES AND STRUCTURES BEFORE THE START OF WORK.
 - IF CONFLICTS ARE FOUND THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND DESIGN ENGINEER FOR INSTRUCTION BEFORE PROCEEDING WITH WORK.
 - MISS UTILITY SHALL BE NOTIFIED THREE (3) DAYS PRIOR TO EXCAVATION.
- ALL WORK SHALL COMPLY WITH ALL APPLICABLE STATE, FEDERAL AND LOCAL CODES. ALL NECESSARY LICENSES AND PERMITS SHALL BE OBTAINED BY THE CONTRACTOR AT HIS EXPENSE UNLESS PREVIOUSLY OBTAINED BY OWNER. THE CONTRACTOR SHALL ERRECT AND MAINTAIN, AS REQUIRED BY THE CONDITIONS AND PROGRESS OF THE WORK, ALL NECESSARY SAFEGUARDS FOR SAFETY AND PROTECTION.
- DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK TO BE PERFORMED. IT MUST BE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AS AMENDED AND ALL RULES AND REGULATIONS THERE TO APPLICABLE.
- BASED UPON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) NUMBER 100050206K, EFFECTIVE DATE MARCH 16, 2015, THE ENTIRE PROPERTY IS LOCATED IN AN AREA DESIGNATED AS FLOOD ZONE "X" (UNSHADED), WHICH IS AN AREA THAT HAS BEEN DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN.

SUSSEX COUNTY ZONING CODE - SECTION 115-172-B

- NO MATERIAL MAY BE BROUGHT FROM OFF THE SITE FOR PROCESSING, MIXING OR SIMILAR PURPOSES.
- THE EXCAVATING, EXTRACTION OR FILLING OPERATION SHALL BE CONTROLLED TO OFFER REASONABLE PROTECTION TO SURROUNDING PROPERTIES AND THE NEIGHBORHOOD, PARTICULARLY AS REGARDS TO ODORS, DUST, AIR OR WATER POLLUTION AND USES OF ROADS OR STREETS PROVIDING ACCESS TO THE SITE.
- THE LOCATION OF THE EXCAVATION, EXTRACTION OR FILLING WITH RESPECT TO PROPERTY LINES, THE DEPTH OF EXCAVATION OR FILLING AND RELATION TO THE WATER TABLE OR FLOOD CRITERIA AND THE SLOPE OF THE SIDES OF THE EXCAVATION SHALL BE CONTROLLED TO PREVENT A CONTINUING UNSIGHTLY, HAZARDOUS OR WASTEFUL CONDITION OF THE LAND.
- THE BORROW PIT SHALL BE SURROUNDED BY A LANDSCAPED UNEXCAVATED BUFFER STRIP OF OPEN SPACE A MINIMUM DISTANCE OF 100 FEET FROM ANY STREET LINES AND A MINIMUM DISTANCE OF 50 FEET FROM ALL OTHER PROPERTY LINES. THE BUFFER STRIP SHALL REMAIN FREE OF ANY BUILDINGS OR STREETS.
- THE BORROW PIT SHALL BE AT LEAST 200 FEET FROM ANY DWELING ON PROPERTY OF OTHER OWNERSHIP.
- PRIOR TO ISSUANCE OF A NOTICE TO PROCEED WITH DEVELOPMENT OF THE BORROW PIT, A SITE PLAN SHALL BE SUBMITTED TO THE COMMISSION FOR REVIEW. THE SITE PLAN SHALL BE PREPARED IN COMPLIANCE WITH THIS SUBSECTION, ARTICLE XXXIII OF THIS CHAPTER AND THE FOLLOWINGS:
 - SITE PLANS SHALL DESIGNATE EXISTING SITE CONDITIONS, PROPOSED EXCAVATION AREA AND PROPOSED RECLAMATION PLANS.
 - APPROVALS SHALL BE REQUIRED TO BE SUBMITTED FROM THE APPROPRIATE GOVERNMENTAL AGENCY FOR INGRESS/EGRESS AND EROSION/SEDIMENT CONTROL. [AMENDED 9-30-1986 BY ORD. NO. 382]
 - THE COMMISSION MAY REQUEST THAT THE SITE BE FENCED OR SCREENED AND MAY ESTABLISH GREATER SETBACKS DUE TO INDIVIDUAL SITE-RELATED CONDITIONS.
 - THE COMMISSION MAY REQUEST THAT THE SITE PLAN BE REVIEWED BY THE TECHNICAL ADVISORY COMMITTEE.
 - IN ORDER TO ASSURE COMPLETION OF THE APPROVED RECLAMATION, THE COMMISSION MAY RECOMMEND TO THE COUNTY COUNCIL THAT PERFORMANCE GUARANTIES BE REQUIRED.



DETAIL - CROSS SECTION A-A

LEGEND

EXISTING	PROPOSED	DESCRIPTION
[Symbol]	[Symbol]	24 FOOT WIDE PAVED ACCESS ROAD
[Symbol]	[Symbol]	PROPERTY LINE
[Symbol]	[Symbol]	CONTOUR LINE MINOR
[Symbol]	[Symbol]	CONTOUR LINE MAJOR
[Symbol]	[Symbol]	BORROW PIT AREA
[Symbol]	[Symbol]	WOOD'S LINE
[Symbol]	[Symbol]	IRON PIPE FOUND
[Symbol]	[Symbol]	MONUMENT FOUND
[Symbol]	[Symbol]	BUILDING
[Symbol]	[Symbol]	WETLANDS
[Symbol]	[Symbol]	EASEMENT
[Symbol]	[Symbol]	DISTANCE FROM DWELLING
[Symbol]	[Symbol]	24 FOOT WIDE DIRT ACCESS ROAD
[Symbol]	[Symbol]	3 RAIL WHITE VINYL FENCE

ENGINEER CERTIFICATION:
IT IS HEREBY CERTIFIED THAT I AM A REGISTERED ENGINEER IN THE STATE OF DELAWARE. THAT THE INFORMATION SHOWN HEREON HAS BEEN PREPARED UNDER MY SUPERVISION, AND TO MY BEST KNOWLEDGE AND BELIEF, IT COMPLIES WITH APPLICABLE STATE AND LOCAL REGULATIONS AND ORDINANCES. THE DESIGN REPRESENTS GOOD ENGINEERING PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.

SIGNATURE _____ DATE _____
ALAN DECKTOR, PE (DE PE#17771)
PENNONI ASSOCIATES, INC
18072 DAVIDSON DRIVE
MILTON, DE 19968
OFFICE (302) 884-8030 - FAX (302) 884-8054

OWNER'S AND DEVELOPER'S CERTIFICATION:
IT IS HEREBY CERTIFIED THAT I AM THE OWNER/DEVELOPER OF THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN. THE PLAN WAS MADE AT MY DIRECTION, THAT I ACKNOWLEDGE THE SAME TO BE MY ACT. IT IS MY DESIRE TO HAVE THE PLAN DEVELOPED AS SHOWN AND IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS.

SIGNATURE _____ DATE _____
M. L. JOSEPH SAND & GRAVEL INC.
25136 DUPONT BOULEVARD
GEORGETOWN, DE, 19847
(302)-856-7396

PENNONI ASSOCIATES INC.
18072 Davidson Drive
Milton, DE 19968
T 302.884.8030 F 302.684.8054

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

BORROW PIT APPLICATION
SUSSEX COUNTY TAX MAP: 231-6.00-21.00, 231-6.00-22.01
NANICOCK HUNDRED, SEASHORE HIGHWAY, GEORGETOWN, DE

CONDITIONAL USE SITE PLAN

M. L. JOSEPH SAND & GRAVEL INC.
25136 DUPONT BOULEVARD
GEORGETOWN, DE 19847

NO.	DATE	REVISIONS	BY

PROJECT: **MLJXC18004**

DATE: 2019-01-10

DRAWING SCALE: 1"=200'

DRAWN BY: LFS

APPROVED BY: AMD

CS1001

SHEET 2 OF 6

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OTHERS OR FOR THE EXTENSIONS OF THE PROJECT OR ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR APPROVAL BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LOSS OF EXPOSURE TO PENNONI ASSOCIATES, AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

STOCKLEY MATERIALS LLC M. L. JOSEPH SAND AND GRAVEL INC. BORROW PIT

CASE NO. CU2155
ZONING MAP EXCEPTION - AR-1 | CONDITIONAL USE



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PROJECT TEAM

Contract Purchaser

M L Joseph Sand & Gravel
Kenneth P Adams
25136 DuPont Boulevard
Georgetown DE 19947

Applicant

Stockley Materials LLC
Kenneth P Adams
25136 DuPont Boulevard
Georgetown DE 19947

Principal Consultant

Pennoni Associates Inc.
Mark H Davidson
18072 Davidson Drive
Milton, DE 19968

Legal Counsel

Dennis L Schrader, Partner
David C Hutt, Partner
Morris James LLP
107 W. Market Street
PO box 690
Georgetown DE 19947

Project Engineer(s)

Pennoni Associates Inc.
Alan M. Decktor, PE, ENV, SP
Milton DE 19968

Project Surveyor

Pennoni Associates Inc.
John W Haupt, PLS
18072 Davidson Drive
Milton, DE 19968

Environmental Consultant

Accent Environmental, LLC
William J. Gangloff
PO Box 788
Millsboro, DE 19966

Transportation Engineer

Pennoni Associates Inc.
Kyle Clevenger PE, PTOE
18072 Davidson Drive
Milton, DE 19968

J D Hynes & Associates, Inc.

Geotechnical and Environmental Consultants
32185 Beaver Run Drive
Salisbury, MD 21804

Mark H. Davidson / Associate Vice President

Principal Land Planner/Office Director

EDUCATION

University of Delaware; Civil Engineering, (1986-1990)

Land Surveying, Delaware Technical & Community College (1984-1986) and Wastewater Microbiology Diploma (1997)

Land Planning, Institute for Public Administration (2006)

CERTIFICATIONS

DNREC Class A Percolation Tester & Class B Septic Designer, (DE #2418)

Sediment & Stormwater Management, Responsible Personnel, DE (#8760) and MD (#4914)

DNREC Certified Construction Reviewer: DE (#1270)

Delaware Notary

TRAININGS

Hydrology, Delaware TR-20 (1993)

Reducing Flood Hazard in Coastal Development (1996)

Law for Managers/Supervisors (1999)

State and Federal Laws (2000)

Advanced Real Estate Law in Delaware (2002)

Land Conservation and Historic Preservation (2003)

Land Surveying Business Diploma (1998)

Project Manager Training I, Pennoni (2015)

PROFESSIONAL AFFILIATIONS

National Onsite Wastewater Recycling Association

Delaware Onsite Wastewater Recycling Association

American Planning Association

American Institute of Certified Planners

HONORS/AWARDS

Association of Professionals Philanthropy, Brandywine Chapter Fundraising Nominee (2014)

Notable Networker Award, BNI (2013)

EXPERIENCE SUMMARY

Mark H. Davidson serves as Associate Vice President of Pennoni and Office Director for our Southern Delaware, Milton Office. Mark also serves as the Principal Land Planner for Pennoni. He has over 33-years of past experience in Surveying, Engineering, Consulting, Construction and Land Planning. For 12-years he owned a professional engineering, surveying, land planning, environmental and consulting firm that provided professional consulting and design in land planning for residential, industrial, institutional, municipal and commercial applications to a wide range of clients in Delaware and Maryland. Mr. Davidson's project experience includes land development planning, surveying, engineering, environmental design and permitting; construction and project consulting, management and inspection; water resource consulting, management and inspection and municipal consulting, planning and inspection for residential, industrial, institutional, municipal and commercial applications.

Mark is a past director of the Delaware Onsite Wastewater Recycling Association as well as a member of the American Planning Association, American Institute of Certified Planners and has served in the past as a committee member of Delaware Low Impact Development Roundtable Committee, Delaware Pollution Control Strategy Committee, Delaware Sediment & Stormwater Regulatory Advisory Committee, and the Delaware Technical & Community College A/E Curriculum Committee. He was also nominated for the Brandywine Chapter Association of Fundraising Professionals Philanthropy Award and has won the BNI Notable Networker Award.

Along with all the experience and education stated and with many years of combined experience in Surveying, Engineering, Consulting and Land Planning, he has been responsible for providing consulting, layout and design in surveying, engineering and land planning for residential, industrial, institutional, municipal and commercial applications to a wide range of clients in Delaware, Maryland, Virginia and West Virginia. He has project managed, studied, planned, surveyed, designed and engineered sustainable, master-planned communities, commercial and urban redevelopment projects, and the public infrastructure that supports them.

Mark has provided nationwide land planning consulting services to a variety of clientele to help coordinate project startups as well as final construction consulting services when it came to commercial, residential, industrial, municipal, educational and community land planning. Provided additional consulting in civil/site engineering, stormwater management, erosion and sediment control, wastewater collection and disposal, transportation, and environmental. Market areas practiced; Delaware, Maryland, West Virginia, Virginia, North Carolina, South Carolina, North Dakota, Puerto Rico, Canada and Panama.

Additional Project experience includes cutting edge design and technology as well as value engineering to help clients through the ever-changing market including but not limited to solar voltaic and wind generation projects.

He was currently appointed by the Secretary of DNREC to serve 3-years on the On Site Septic Advisory Board for the State of Delaware.



Pennoni Associates Inc., established in 1966, is a multi-disciplined engineering and design consulting firm that provides personalized services and solutions to meet the needs of our diverse clients. Pennoni employs 1,250 professional, technical, and administrative personnel in 35 offices throughout Pennsylvania, New Jersey, Delaware, New England, Maryland, Florida, North Carolina, Ohio, Virginia, Illinois and New York. Pennoni provides services to local, state, and federal governments, private, commercial, industrial, and construction clients as well as to other professional firms.

Pennoni Associates Inc. Key Personnel:

Mark H. Davidson, Vice President

Office Director

Principal Land Planner/Consultant

Experience: 33-years

Education: University of Delaware 1986-1990 – Civil Engineering

Delaware Technical & Community College 1984-1986 – Land Surveying

Land Surveying Business Diploma 1998

Institute for Public Administration 2006 – Land Planning

Delaware TR-20 Hydrology 1993

Reducing Flood Hazard Coastal Development 1996

Wastewater Microbiology 1997

Land Conservation/Historic Preservation 2003

Licenses/Certifications: Delaware DNREC Class A & B License #2418

Sediment & Stormwater Management Certification, DE #860, MD #4914

DNREC Certified Construction Reviewer DE #1270

IPA Delaware State Planning Certification

- ❖ Civil Engineering/Land Surveying
- ❖ Project/Construction Management
- ❖ Land Planning/Consulting
- ❖ Transportation engineering
- ❖ Soils/Wetlands Permitting/Consulting
- ❖ Water/Wastewater Engineering
- ❖ Contract Writing/Negotiating
- ❖ Policy Planning & Reporting
- ❖ FEMA Permitting
- ❖ Stormwater/Wastewater Management
- ❖ Municipal Engineering
- ❖ Local/State Highway & Road Planning/Design
- ❖ Shore, Dune and Beach Replenishment Design
- ❖ Pollution Control Strategy Permitting
- ❖ Strategic Planning
- ❖ Comprehensive Land Use Planning
- ❖ Project & Business Development

Alan M. Decktor, PE, ENV SP, Senior Project Engineer/Civil Engineer

Experience: 12-years

Education: University of Delaware, Bachelor of Science in Civil Engineering

Licenses/Certifications: Delaware Professional Engineer #17771

Pennsylvania Professional Engineer #PE081635

Maryland Professional Engineer #51306

NCEES Record #54878

Envision Sustainable Professional, ISI

- ❖ Civil Engineering
- ❖ Survey Experience
- ❖ Project Management, Proposal Preparation
- ❖ Residential and Commercial Design/Permitting
- ❖ Municipal Services/Design
- ❖ Contract Administration
- ❖ Construction Administration/Review
- ❖ Subdivision Street and Entrance Design
- ❖ Local/State Highway and Road Planning/Design
- ❖ Innovative Stormwater Design, Hydrology and Hydraulics
- ❖ Erosion and Sediment Control Plans
- ❖ Water and Wastewater Design
- ❖ Utility Design
- ❖ Land Planning Consulting
- ❖ Sustainable Design Experience

Peter J. Stone, RLA, LEED AP Project Landscape Architect**Experience:** 17-years**Education:** Bachelor of Science in Landscape Architecture**Licenses/Certifications:**

Delaware Landscape Architect #363,

Maryland Landscape Architect#3068,

Virginia Landscape Architect #1436

LEED AP BD+C Certification

- ❖ Landscape and Lighting Design
- ❖ Construction Administration
- ❖ Residential and Commercial Design
- ❖ Site Detailing, layout and design
- ❖ Public Hearings
- ❖ Subdivision Street and Entrance Design
- ❖ LEED Design Experience
- ❖ Innovative Stormwater Design
- ❖ Utility Design
- ❖ Land Planning/Consulting

John W Haupt, PLS, Senior Surveyor**Experience:** 42-years**Education:** University of Delaware**Licenses/Certifications:** DE Licensed Professional Surveyor #585,

MD Licensed Professional Surveyor #21545

- ❖ Residential & Commercial Land Surveying
- ❖ Industrial and Municipal Land Surveying
- ❖ Topography and Wetlands Surveying
- ❖ Construction Stakeout
- ❖ FEMA/Floodplain Surveying/Permitting
- ❖ State Highway and Local Roads Surveying
- ❖ GPS Surveying
- ❖ Deed Research & Interpretation
- ❖ Boundary and Easement Legal Descriptions
- ❖ Shore, Dune and Beach Replenishment Surveying
- ❖ Municipal and Highway Engineering
- ❖ Stormwater Management Design/Permitting
- ❖ Wastewater Management Design/Permitting
- ❖ Boundary Survey Determinations/Management
- ❖ FEMA/Floodplain Design/Permitting

Kyle O. Clevenger, P.E., PTOE Project Engineer/Traffic Engineer**Experience:** 9 years**Education:** University of Delaware, Bachelor of Science in Civil Engineering**Licenses/Certifications: Professional Engineer:**

Delaware #18723, Maryland #50767,

Virginia #0402058153,

Washington DC #909066

- ❖ Traffic Capacity and Alternatives Analysis
- ❖ Traffic Impact Studies
- ❖ Maintenance of Traffic/Construction Phasing Design
- ❖ Signing and Pavement Marking Design
- ❖ Traffic Signal Design
- ❖ Roadway Lighting Design
- ❖ ADA Curb Ramp Design
- ❖ Public Hearings
- ❖ Traffic and Safety Studies
- ❖ Data Collection
- ❖ Utility coordination/Design
- ❖ Land Planning/Consulting

Using state-of-the-art technology and equipment, **Pennoni** offers full service capabilities in the following areas:

Bridge & Highway Engineering
Civil Engineering
Construction & Fabrication Management
Construction Material Testing
Electrical Engineering
Environmental Engineering
Environmental Sciences
Geographic Information Systems (GIS)
Geotechnical Engineering
Inspection & Testing
Landscape Architecture
Mechanical Engineering
Planning
Plumbing/Fire Protection Engineering
Site Design

Solid & Hazardous Waste Management
Land Surveying
Transportation Engineering
Underwater Inspections
Water & Wastewater Management
Municipal Engineering
Printing and Reproduction
Project Management & Consulting
Construction Management (CCR Reporting and Inspection)
Multiple Federal, State and County Permitting
Conservation Design and Consulting Services
Energy

The Sussex County Planning & Zoning Commission will hold a Public Hearing on **Thursday, January 24, 2019 at 6:00 pm** to hear and consider the following application. All hearings are held in County Council Chambers, 2 The Circle, Georgetown, DE.

2018-24 GOOD WILL FARM – JOSEPH M. AND KAREN M. ZDURIENCIK AND JOEL DANIEL GUSKY– A cluster subdivision to divide 56.41 acres +/- into 104 single family lots to be located on a certain parcel of land lying and being in Baltimore Hundred, Sussex County. The properties are lying on the west side of Bayard Rd, approximately 1,200 ft. north of Double Bridges Rd. Tax Parcels: 134-18.00-55.00, 134-19.00-5.00 and 6.00. Zoning District. AR-1 (Agricultural Residential District).

The Sussex County Planning & Zoning Commission will hold a Public Hearing on **Thursday, January 24, 2019 at 6:00 pm**. The Sussex County Council will hold a Public Hearing on **Tuesday, February 19, 2019 at 1:30 pm** to hear and consider the following applications. All public hearings are held in County Council Chambers, 2 The Circle, Georgetown, DE.

C/U 2155 STOCKLEY MATERIALS, LLC - AN ORDINANCE TO GRANT A CONDITIONAL USE OF LAND IN AN AR-1 AGRICULTURAL RESIDENTIAL DISTRICT FOR A BORROW PIT TO BE LOCATED ON A CERTAIN PARCEL OF LAND LYING AND BEING IN NANTICOKE HUNDRED, SUSSEX COUNTY, CONTAINING 158.74 ACRES, MORE OR LESS. The property is lying on the southwest side of Seashore Hwy. (Rt. 18), approximately 0.72 mile southeast of Gravely Branch Rd. 911 Address: N/A. Tax Parcels: 231-6.00-21.00 and 22.01.

C/U 2157 COUNTRY LAWN CARE & MAINTENANCE, LLC (C/O GERALD AND STEPHANIA DOUGHERTY) - AN ORDINANCE TO GRANT A CONDITIONAL USE OF LAND IN AN AR-1 AGRICULTURAL RESIDENTIAL DISTRICT FOR A LANDSCAPING BUSINESS TO BE LOCATED ON A CERTAIN PARCEL OF LAND LYING AND BEING IN INDIAN RIVER HUNDRED, SUSSEX COUNTY, CONTAINING 4.26 ACRES, MORE OR LESS. The property is lying on the north side of Hollymount Rd., approximately 0.42 mile east of Beaver Dam Rd. 911 Address: 30435 Hollymount Rd., Harbeson. Tax Parcel: 234-11.00-78.07.

C/Z 1870 COROC/REHOBOTH III, LLC - AN ORDINANCE TO AMEND THE COMPREHENSIVE ZONING MAP OF SUSSEX COUNTY FROM AN AR-1 AGRICULTURAL RESIDENTIAL DISTRICT TO A C-3 HEAVY COMMERCIAL DISTRICT FOR A CERTAIN PARCEL OF LAND LYING AND BEING IN LEWES AND REHOBOTH HUNDRED, SUSSEX COUNTY, CONTAINING 10.001 ACRES, MORE OR LESS. The property is lying on the north side of Holland Glade Rd., approximately 575 ft. east of Coastal Hwy. (Rt. 1). 911 Address: N/A. Tax Parcel: 334-13.00-325.36.

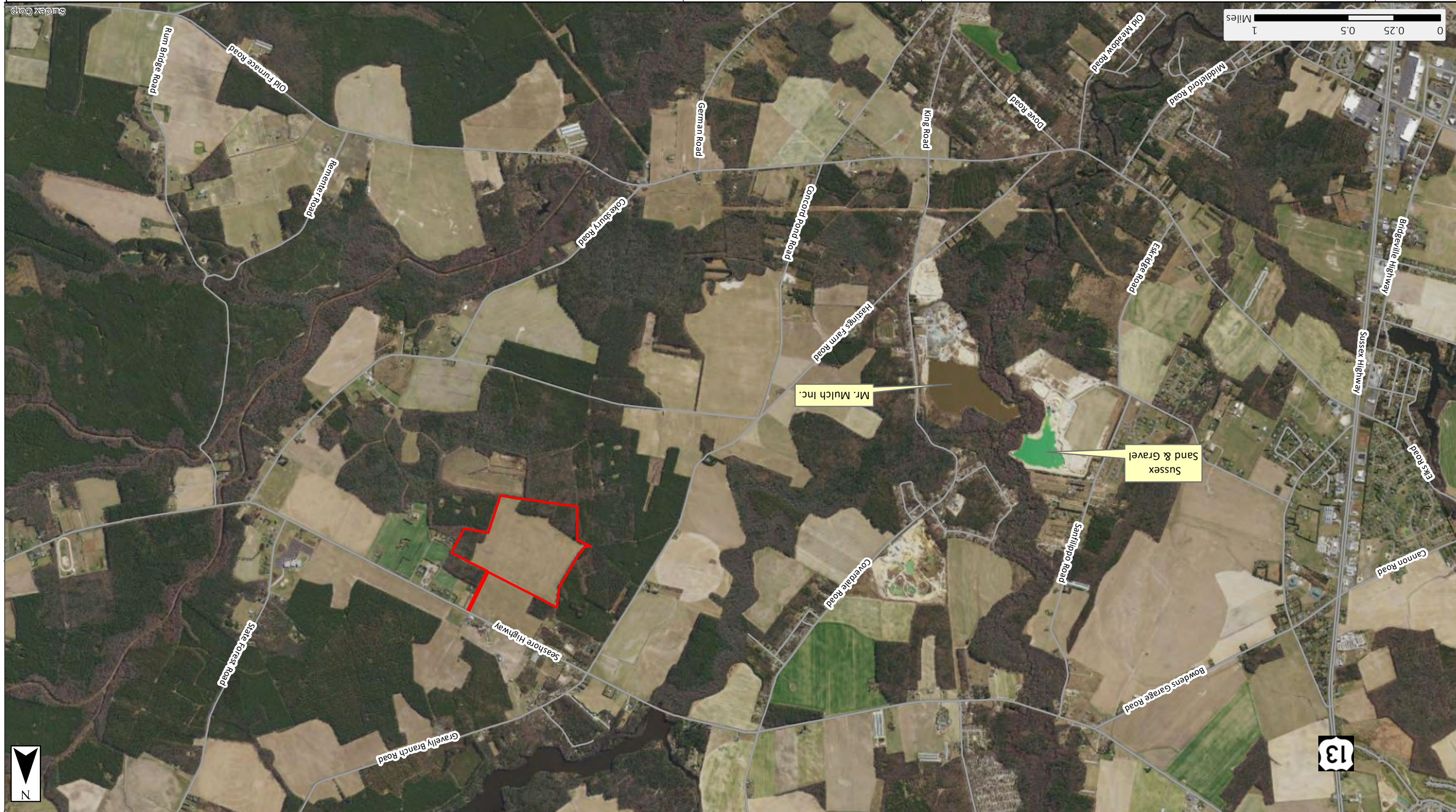
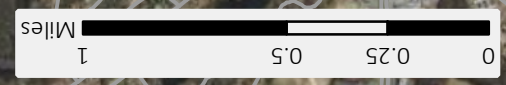
All interested parties should attend and provide testimony. If you are unable to attend the public hearing written comments will be accepted. Written comments shall be submitted prior to the public hearing.

Additional information pertaining to the applications may be reviewed in the Planning & Zoning Department located at 2 The Circle Georgetown, DE or by calling 302-855-7878. Office hours are Monday through Friday, 8:30 am to 4:30 pm.





— Roads
□ Subject Parcels



Surdex Corp

File #: _____

Planning & Zoning Commission 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)

Conditional Use

Zoning Map Amendment

Site Address of Conditional Use/Zoning Map Amendment

SW/RT 18 1.5 Miles NW/RT 529, Georgetown, DE 19947

Type of Conditional Use Requested:

Section 115-172-(B) Excavation of Borrow Pit, Extraction, Processing and Removal of sand, fill, gravel or stone and other major excavations.

Tax Map #: 231-6.00-21.00-22.01 **Size of Parcel(s):** 158.74 AC +/-

Current Zoning: AR1 **Proposed Zoning:** AR1|CU **Size of Building:** See Plans

Land Use Classification: Low Density Area

Water Provider: N/A **Sewer Provider:** N/A

Applicant Information

Applicant Name: Stockley Materials LLC
Applicant Address: 25136 DuPont Boulevard
City: Georgetown State: DE ZipCode: 19947
Phone #: (302) 856-7601 E-mail: kadams@melvinjoseph.com

Owner Information

Owner Name: Stockley Materials LIC (Mr. Ken Adams)
Owner Address: 25136 DuPont Boulevard
City: Georgetown State: DE Zip Code: 19947
Phone #: (302) 856-7601 E-mail: kadams@melvinjoseph.com

Agent/Attorney/Engineer Information

Agent/Attorney/Engineer Name: Mark H Davidson | Pennoni Associates
Agent/Attorney/Engineer Address: 18072 Davidson Drive
City: Milton State: DE Zip Code: 19968
Phone #: (302) 684-8030 E-mail: mdavidson@pennoni.com



Check List for Sussex County Planning & Zoning Applications

The following shall be submitted with the application

- Completed Application**
- Provide eight (8) copies of the Site Plan or Survey of the property**
 - Survey shall show the location of existing or proposed building(s), building setbacks, parking area, proposed entrance location, etc.
 - Provide a PDF of Plans (may be e-mailed to a staff member)
 - Deed or Legal description
- Provide Fee \$500.00**
- Optional - Additional information for the Commission/Council to consider** (ex. architectural elevations, photos, exhibit books, etc.) If provided submit 8 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.**
- DeIDOT Service Level Evaluation Request Response**
- PLUS Response Letter** (if required)


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 the Sussex County Council and any other hearing necessary for this application and that I will answer any questions to the best of my ability to respond to the present and future needs, the health, safety, morals, convenience, order, prosperity, and general welfare of the inhabitants of Sussex County, Delaware.

Signature of Applicant/Agent/Attorney

Date: _____

Signature of Owner

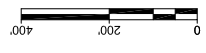
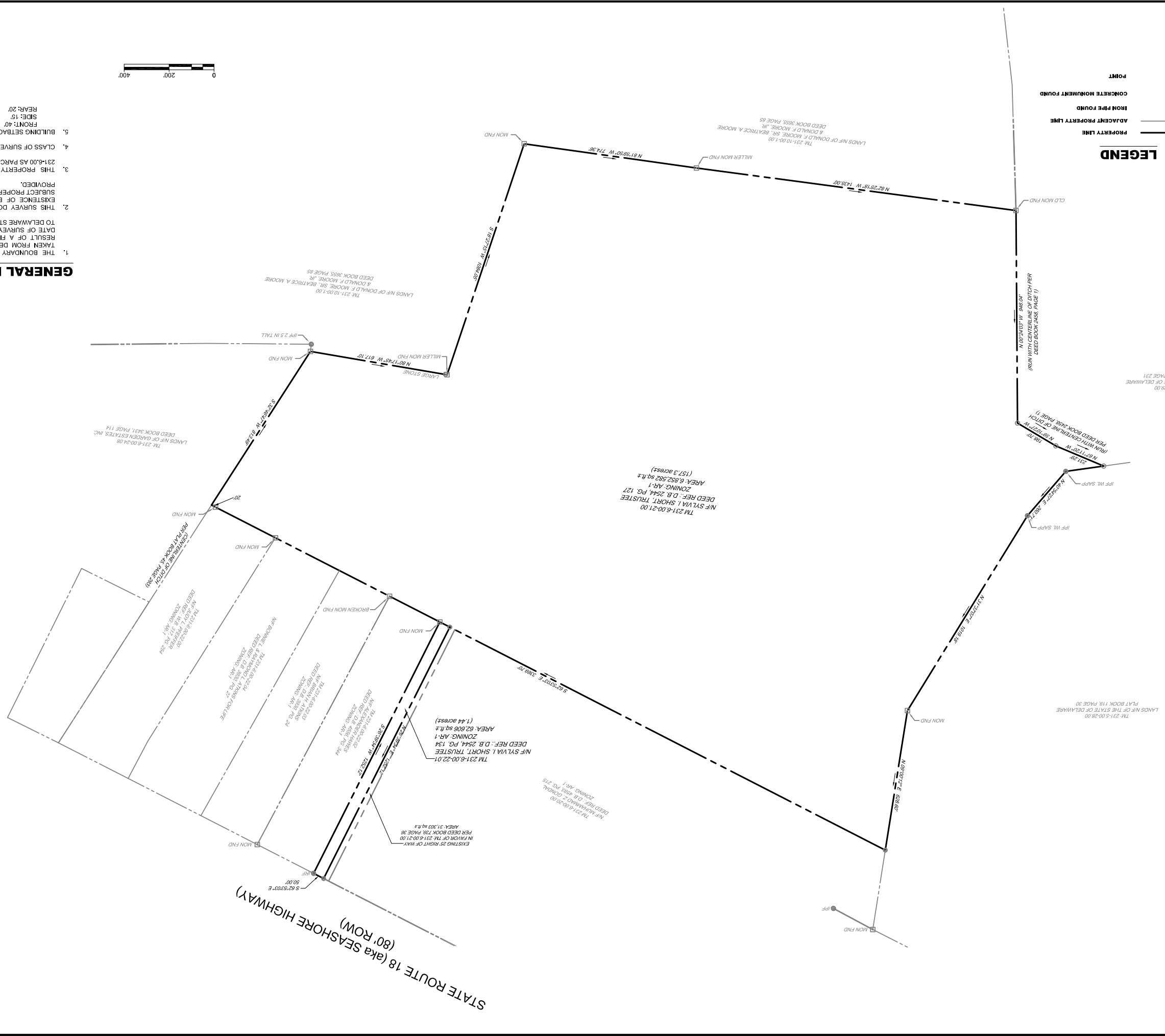
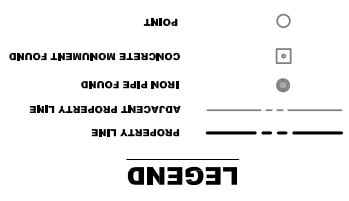


Date: 8-29-18

For office use only:

Date Submitted: _____ Fee: \$500.00 Check #: _____
Staff accepting application: _____ Application & Case #: _____
Location of property: _____

Subdivision: _____
Date of PC Hearing: _____ Recommendation of PC Commission: _____
Date of CC Hearing: _____ Decision of CC: _____



REAR: 20'
SIDE: 15'
FRONT: 40'

5. BUILDING SETBACKS (CH. 115-25 C):

4. CLASS OF SURVEY: RURAL

3. THIS PROPERTY APPEARS ON SUSSEX COUNTY TAX MAP 231-6.00 AS PARCELS 21.00 & 22.01.

2. THIS SURVEY DOES NOT VERIFY TO THE LOCATION AND/OR EXISTENCE OF EASEMENTS OR RIGHTS OF WAY CROSSING SUBJECT PROPERTY AS NO TITLE SEARCH WAS REQUESTED OR PROVIDED.

1. THE BOUNDARY INFORMATION SHOWN ON THIS PLAT WAS TAKEN FROM DEEDS ON PUBLIC RECORD AND IS ALSO THE RESULT OF A FIELD SURVEY BY PENNING ASSOCIATES INC. DATE OF SURVEY: JUNE 27, 2018. BEARING SYSTEM ROTATED TO DELAWARE STATE PLANE COORDINATE SYSTEM.

GENERAL NOTES:

ALL DOCUMENTS PREPARED BY PENNING ASSOCIATES INC. HAVE BEEN REVIEWED BY AN ENGINEER AND APPROVED FOR THE PROJECT. THE ENGINEER'S REVIEW IS LIMITED TO THE TECHNICAL ASPECTS OF THE SURVEY AND DOES NOT CONSTITUTE A GUARANTEE OF THE ACCURACY OF THE INFORMATION PROVIDED HEREON. PENNING ASSOCIATES INC. SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED HEREON. PENNING ASSOCIATES INC. SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED HEREON.

DATE: # # # # #

NO. # # # # #

BY # # # # #

REVISIONS

TM # 231-6.00 PARCELS 21.00 & 22.01

LANDS N/F OF SYLVIA I. SHORT, TRUSTEE

BOUNDARY SURVEY

STOCKLEY MATERIALS LLC

25136 DUPONT BOULEVARD

GEORGETOWN, DELAWARE 19947

SUSSEX COUNTY, DELAWARE

NANTICOKE HUNDRED

APPROVED BY: AMD

DATE: 2018-06-27

DRAWING SCALE: 1" = 200'

PROJECT: MLJCX18004

APPROVED BY: AMD

DATE: 2018-06-27

DRAWING SCALE: 1" = 200'

PROJECT: MLJCX18004

APPROVED BY: AMD

DATE: 2018-06-27

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DRAWING SCALE: 1" = 200'

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APPROVED BY: AMD

DATE: 2018-06-27

DRAWING SCALE: 1" = 200'

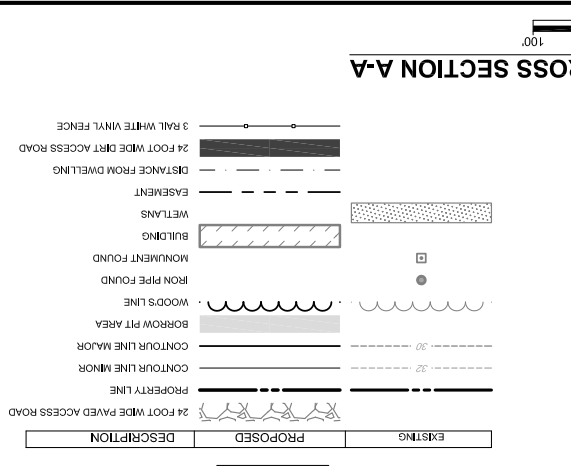
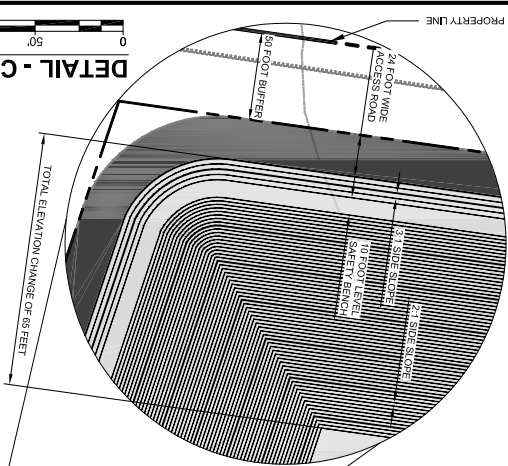
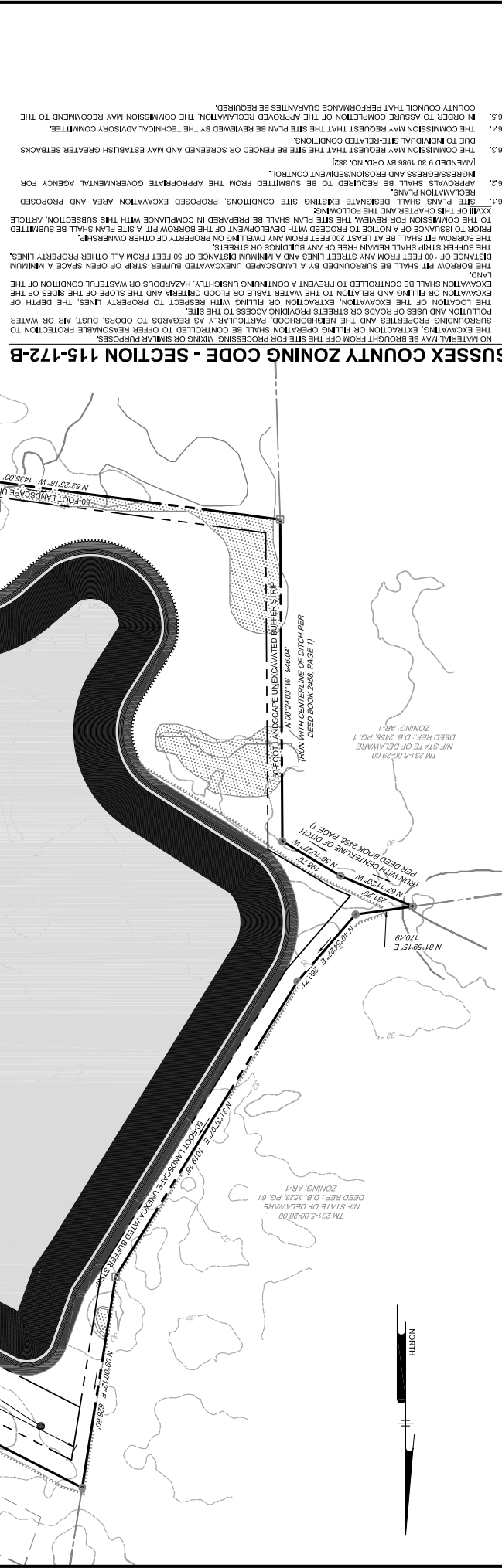
PROJECT: MLJCX18004

APPROVED BY: AMD

DATE: 2018-06-27

DRAWING SCALE: 1" = 200'

PROJECT: MLJCX18004



DATE	SIGNATURE
	ALAN DEKOR, PE (DE PE17771) PENNON ASSOCIATES, INC. 18072 DAWSON DRIVE MILFORD, DE 19965 OFFICE (302) 684-8030 - FAX (302) 684-8054
	M. L. JOSEPH SAND & GRAVEL, INC. 25136 DUPONT BOULEVARD GEORGETOWN, DE 19947 (302)-456-7396

ENGINEER CERTIFICATION:
 IT IS HEREBY CERTIFIED THAT I AM A REGISTERED ENGINEER IN THE STATE OF DELAWARE. I HAVE EXAMINED THE PLANS AND SPECIFICATIONS AND AM Satisfied THAT THEY COMPLY WITH ALL APPLICABLE LAWS AND REGULATIONS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.

OWNER'S AND DEVELOPER'S CERTIFICATION:
 WE HEREBY CERTIFY THAT THE INFORMATION SHOWN HEREON HAS BEEN MADE BY US OR BY OTHERS WHOSE ACCURACY AND TRUTHFULNESS WE BELIEVE TO BE TRUE AND CORRECT. WE AGREE TO HOLD THE ENGINEER HARMLESS FROM AND AGAINST ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING FROM THE INFORMATION SHOWN HEREON.

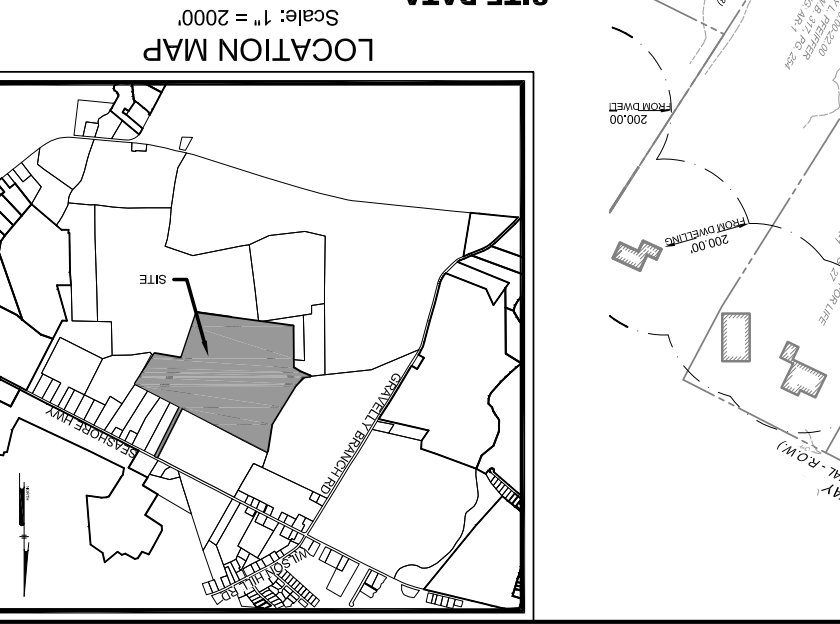
GENERAL NOTES:

- ELEVATIONS ARE BASED ON NAVD 88 AND DE STATE PLANE COORDINATE SYSTEM AND IS HORIZONTAL DATUM. THE BOUNDARY INFORMATION SHOWN ON THIS PLAN WAS COMPILED FROM DOCUMENTS OF PUBLIC RECORD AND AN ACTUAL FIELD SURVEY BY PENNON ASSOCIATES, L.L.C. DATED APRIL 2017. ALL PROVIDED EASEMENTS ARE SHOWN AS SHOWN ON THIS PLAN, HOWEVER, THIS PLAN AND SURVEY DOES NOT VERIFY THE EXISTENCE OF NON-CONFORMING USES OR EASEMENTS.
- UNLESS SPECIFICALLY STATED OR SHOWN HEREON TO THE CONTRARY, THIS SURVEY IS MADE SUBJECT TO RIGHTS OR INTEREST OF THE UNITED STATES OF AMERICA OR STATE OF DELAWARE OVER LANDS NOW OR FORMERLY FLOWED BY TIDEWATER BUT NO LONGER VISIBLE OR PHYSICALLY EVIDENT, OR LANDS CONTAINING ANY ANIMAL, MARINE OR BOTANICAL SPECIES REGULATED BY OR UNDER THE BUILDING SETBACK LINES, ZONING REGULATIONS OR LINES ESTABLISHED BY ANY FEDERAL, STATE OR LOCAL AGENCY WHICH MAY AFFECT THE BUILDING OR DEVELOPMENT POTENTIAL OF THE SUBJECT PROPERTY.
- ANY SUBSURFACE OR SUBTERRANEAN CONDITION, EASEMENTS OR RIGHTS INCLUDING, BUT NOT LIMITED TO MINERAL OR MINING RIGHTS, OR THE LOCATION OF OR RIGHTS TO ANY SUBSURFACE COOPERATION OR FACILITIES OR ANY OTHER NATURAL OR MAN-MADE SUBSURFACE STRUCTURES, CONTAINERS OR FACILITIES OR ANY OTHER NATURAL OR MAN-MADE SUBSURFACE PROPERTY, WHICH MAY OR MAY NOT AFFECT THE USE OR DEVELOPMENT POTENTIAL OF THE SUBJECT PROPERTY, IS NOT SHOWN ON THIS PLAN AND SURVEY. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND STRUCTURES BEFORE THE START OF WORK.
- IF CONFLICTS ARE FOUND THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND DESIGN MISS UTILITIES BEFORE THE START OF WORK.
- ALL WORK SHALL COMPLY WITH ALL APPLICABLE STATE, FEDERAL AND LOCAL CODES. ALL NECESSARY LICENSES AND PERMITS SHALL BE OBTAINED BY THE CONTRACTOR AT HIS EXPENSE UNLESS OTHERWISE STATED BY OWNER. THE CONTRACTOR SHALL MAINTAIN AS REQUIRED BY THE CONDITIONS OF DELAWARE, THAT THE EMBODIMENT SHOWN HEREON HAS BEEN MADE BY US OR BY OTHERS WHOSE ACCURACY AND TRUTHFULNESS WE BELIEVE TO BE TRUE AND CORRECT. WE AGREE TO HOLD THE ENGINEER HARMLESS FROM AND AGAINST ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING FROM THE INFORMATION SHOWN HEREON.
- THE BORROW PIT SHALL BE NOTIFIED THREE (3) DAYS PRIOR TO EXCAVATION.
- COMPLETENESS OR ACCURACY OF LOCATION AND DEPTH OF UNDERGROUND UTILITIES AND STRUCTURES IS NOT GUARANTEED.
- THE NATURE AND EXACT LOCATION OF EXISTING UTILITIES SHOULD BE VERIFIED PRIOR TO EXCAVATION. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND STRUCTURES BEFORE THE START OF WORK.
- THE LOCATION OF THE EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN HAVE BEEN TAKEN FROM EXISTING UTILITY RECORDS AVAILABLE AT THE TIME THESE PLANS WERE PREPARED AND FROM SURFACE OBSERVATION OF THE SITE. THE NATURE AND EXACT LOCATION OF EXISTING UTILITIES SHOULD BE VERIFIED PRIOR TO EXCAVATION. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND STRUCTURES BEFORE THE START OF WORK.
- THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND STRUCTURES BEFORE THE START OF WORK.
- MISS UTILITIES SHALL BE NOTIFIED THREE (3) DAYS PRIOR TO EXCAVATION.
- IF CONFLICTS ARE FOUND THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND DESIGN MISS UTILITIES BEFORE THE START OF WORK.
- ALL WORK SHALL COMPLY WITH ALL APPLICABLE STATE, FEDERAL AND LOCAL CODES. ALL NECESSARY LICENSES AND PERMITS SHALL BE OBTAINED BY THE CONTRACTOR AT HIS EXPENSE UNLESS OTHERWISE STATED BY OWNER. THE CONTRACTOR SHALL MAINTAIN AS REQUIRED BY THE CONDITIONS OF DELAWARE, THAT THE EMBODIMENT SHOWN HEREON HAS BEEN MADE BY US OR BY OTHERS WHOSE ACCURACY AND TRUTHFULNESS WE BELIEVE TO BE TRUE AND CORRECT. WE AGREE TO HOLD THE ENGINEER HARMLESS FROM AND AGAINST ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING FROM THE INFORMATION SHOWN HEREON.
- BASED UPON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP AREA DESIGNATED AS FLOOD ZONE "X UNSHADED", WHICH IS AN AREA THAT HAS BEEN DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN.

SITE DATA:

Scale: 1" = 2000'

NO.	DESCRIPTION	BY	DATE
1. <td>TAX MAP NUMBER:</td> <td></td> <td>221-6-00-21-00, 231-6-00-22-01</td>	TAX MAP NUMBER:		221-6-00-21-00, 231-6-00-22-01
2. <td>DEVELOPER NAME:</td> <td></td> <td>M. L. JOSEPH SAND & GRAVEL, INC. 25136 DUPONT BOULEVARD GEORGETOWN, DE 19947</td>	DEVELOPER NAME:		M. L. JOSEPH SAND & GRAVEL, INC. 25136 DUPONT BOULEVARD GEORGETOWN, DE 19947
3. <td>TOWN/HUNDREDCOUNTY:</td> <td></td> <td>GEORGETOWN / MANCOKE HUNDRED / SUSSEX</td>	TOWN/HUNDREDCOUNTY:		GEORGETOWN / MANCOKE HUNDRED / SUSSEX
4. <td>CURRENT ZONING:</td> <td></td> <td>AR-1 AGRICULTURAL RESIDENTIAL</td>	CURRENT ZONING:		AR-1 AGRICULTURAL RESIDENTIAL
5. <td>PROPOSED ZONING:</td> <td></td> <td>AR-1 CONDITIONAL USE</td>	PROPOSED ZONING:		AR-1 CONDITIONAL USE
6. <td>PROPOSED ZONING:</td> <td></td> <td>TILLED CROPS</td>	PROPOSED ZONING:		TILLED CROPS
7. <td>BORROW PIT, SECTION 115-172(B)</td> <td></td> <td></td>	BORROW PIT, SECTION 115-172(B)		
8. <td>SPEED LIMIT:</td> <td></td> <td>50 MPH</td>	SPEED LIMIT:		50 MPH
9. <td>STATE INVESTMENT AREA:</td> <td></td> <td>LEVEL 4</td>	STATE INVESTMENT AREA:		LEVEL 4
10. <td>SITE AREA AND AVERAGE:</td> <td></td> <td></td>	SITE AREA AND AVERAGE:		
BORROW PIT:			
	PR=1113 AC ±	EX=0 AC ±	
	PR=131 AC ±	EX=256 AC ±	
	PR=67 AC ±	EX=7 AC ±	
	PR=122 AC ±	EX=10 AC ±	
	PR=60 AC ±	EX=0 AC ±	
	PR=72 AC ±	EX=0 AC ±	
	PR=18 AC ±	EX=134 AC ±	
	PR=158 AC ±	EX=158 AC ±	
STAGING AREA:			
	PR=18 AC ±	EX=134 AC ±	
	PR=72 AC ±	EX=10 AC ±	
	PR=122 AC ±	EX=0 AC ±	
	PR=60 AC ±	EX=0 AC ±	
	PR=72 AC ±	EX=0 AC ±	
	PR=18 AC ±	EX=134 AC ±	
	PR=158 AC ±	EX=158 AC ±	
TOTAL:			
	PR=18 AC ±	EX=134 AC ±	
	PR=72 AC ±	EX=10 AC ±	
	PR=122 AC ±	EX=0 AC ±	
	PR=60 AC ±	EX=0 AC ±	
	PR=72 AC ±	EX=0 AC ±	
	PR=18 AC ±	EX=134 AC ±	
	PR=158 AC ±	EX=158 AC ±	
STATE PLAN COORDINATES:			
	LONGITUDE: W-75°30'16.9041"		
	LATITUDE: N-38°41'14.0972"		



BORROW PIT APPLICATION
 SUSSEX COUNTY TAX MAP: 231-6-00-21-00, 231-6-00-22-01
 MANCOKE HUNDRED, SEASHORE HIGHWAY, GEORGETOWN, DE

CONDITIONAL USE SITE PLAN

M. L. JOSEPH SAND & GRAVEL, INC.
 25136 DUPONT BOULEVARD
 GEORGETOWN, DE 19947

Pennon ASSOCIATES, INC.
 18072 Dawson Drive
 Milford, DE 19965
 T 302.684.8030 F 302.684.8054

DATE	NO.	REVISIONS

DATE	NO.	REVISIONS

DATE	NO.	REVISIONS

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK



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

JENNIFER COHAN
SECRETARY

May 30, 2018

Ms. Janelle Cornwell, Director
Sussex County Planning & Zoning
P.O. Box 417
Georgetown, DE 19947

Dear Ms. Cornwell:

The Department has completed its review of a Service Level Evaluation Request for the **Mr. Ken Adams (Stockley Materials, LLC)** conditional use application, which we received on May 3, 2018. This application is for a 140.27-acre assemblage of parcels (Tax Parcels: 231-6.00-21.00 & 22.01). The subject land is located on the southwest side of Delaware Route 18, approximately $\frac{3}{4}$ of a mile southeast of the intersection of Delaware Route 18 and Gravelly Branch Road / Wilson Road (Sussex Road 527). The subject land is currently zoned as AR-1(Agricultural Residential), and the applicant is seeking a conditional use approval to operate a borrow pit.

Per the 2017 Delaware Vehicle Volume Summary, the average daily traffic volumes on average day and on an average summer day along the segment of Delaware Route 18 where the subject land is located, which is from Coverdale Road / Chaplins Chapel Road (Sussex Road 42) to Cokesbury Road (Sussex Road 51), are 9,839 and 12,652 vehicles per day, respectively.

Based on our review, we estimate that the proposed land use will generate fewer than 50 vehicle trips in any hour and fewer than 500 vehicle trips per day. These numbers of trips are DelDOT's minimum warrants for determining that a Traffic Impact Study (TIS) should be required for a particular development. Because the proposed land use would not meet these warrants, we consider the development's traffic impact to be negligible and we do not recommend that the applicant be required to perform a TIS for the subject application. DelDOT's description of this application as negligible with regard to warranting a TIS does not mean that it is negligible in other respects. We recommend that the applicant not be required to perform a TIS for the subject application.

Ms. Janelle M. Cornwell

Page 2 of 2

May 30, 2018

Please contact Mr. Claudy Joinville, at (302) 760-2124, if you have questions concerning this correspondence.

Sincerely,



T. William Brockenbrough, Jr.
County Coordinator
Development Coordination

TWB:cjm

cc: Constance C. Holland, Coordinator, Cabinet Committee on State Planning Issues
Mr. Ken Adams (Stockley Materials, LLC), Applicant
J. Marc Coté, Assistant Director, Development Coordination
Gemez Norwood, South District Public Works Manager, Maintenance and Operations
Steven Sisson, Sussex County Subdivision Coordinator, Development Coordination
Derek Sapp, Subdivision Manager, Development Coordination
Susanne Laws, Subdivision Manager, Development Coordination
Troy Brestel, Project Engineer, Development Coordination
Claudy Joinville, Project Engineer, Development Coordination

PLANNING & ZONING COMMISSION

MARTIN L. ROSS, CHAIRMAN
KIM HOEY STEVENSON, VICE CHAIRMAN
R. KELLER HOPKINS
DOUGLAS B. HUDSON
ROBERT C. WHEATLEY



Sussex County

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

Service Level Evaluation Request Form

This form **shall** be submitted to the Planning and Zoning Office and a response **shall** be received back from DelDOT prior to the applicant being able to submit an application to the Planning and Zoning Office.

Date:

Site Information:

Site Address/Location: South side DE RT 18 |US RT 404 | Seashore Highway; 0.60 Miles East of Gravelly Branch Road/Wilson Hill Road

Tax Parcel Number:

Current Zoning:

Proposed Zoning:

Land Use Classification:

Proposed Use(s):

Square footage of ~~any proposed buildings or number of units:~~
Land

Applicant Information:

Applicant's Name:

Applicant's Address:

City:

State:

Zip Code:

Applicant's Phone Number: (302) 856 7601 | (302) 236 2798

Applicant's e-mail address:

**PLEASE COPY RESPONSE TO:
MARK H. DAVIDSON |
PENNONI
18072 DAVIDSON DRIVE
MILTON, DELAWARE 19968
302-684-6207
MDAVIDSON@PENNONI.COM**

Last updated 1-11-18

**PARTICULAR DESCRIPTION
LANDS NOW OR FORMERLY OF
ML JOSEPH SAND & GRAVEL**

TAX MAP 231-6.00-22.01 and 231-6.00-21.00

All that certain piece, parcel and tract of land lying and being situate in the Nanticoke Hundred of Sussex County, Delaware and being more particularly described as follows for Tax Parcel 22.01:

BEGINNING, at an iron rod found, said iron rod lying on the southerly right of way of Delaware Route 18 (a.k.a. Seashore Highway, 80' ROW), thence from the point of beginning, by and with the common boundary line between this Parcel and Lands now or formerly of Alexander Hawes; **South 26 degrees, 39 minutes, 34 seconds West, 1252.12 feet** to a concrete monument found, said concrete monument being a corner for this Parcel and Lands now or formerly of Alexander Hawes, thence by and with this Parcel and Lands now or formerly of Sylvia I. Short; **North 62 degrees, 53 minutes, 03 seconds West, 50.00 feet** to an iron pipe set, said iron pipe being a corner for this Parcel and a 25 foot right-of-way previously recorded in Deed Book 739, Page 36 in favor of Parcel 21.00, thence by and with this Parcel and said ROW; **North 26 degrees, 39 minutes, 34 seconds East, 1252.12 feet** to an iron pipe set, said iron pipe being a corner for this Parcel and a 25-foot right-of-way, thence by and with this Parcel and the Southerly ROW of State Route 18 (a.k.a. Seashore Highway, 80' ROW); **South 62 degrees, 53 minutes, 03 seconds East, 50 feet** to an iron rod found, said iron rod being the **Point of Beginning** for this description.

This Parcel contains **62,606 square feet** or **1.44 acres** of land, more or less, as shown on a plat prepared by **Pennoni Associates INC.**, titled "**Boundary Survey** dated 27 June 2018.

All that certain piece, parcel and tract of land lying and being situate in the Nanticoke Hundred of Sussex County, Delaware and being more particularly described as follows for Tax Parcel 21.00:

BEGINNING, at a concrete monument found, said concrete monument lying **South 26 degrees, 39 minutes, 34 seconds West, 1252.12 feet** from an iron rod found on the southerly right of way of Delaware Route 18 (a.k.a. Seashore Highway, 80' ROW), thence from the point of beginning, by and with the common boundary line between these lands and Lands now or formerly of Alexander Hawes, Brian H. Atkins, Bonnie L. & Raymond L Atkins and Judy L. Pfeiffer; **South 62 degrees, 53 minutes, 03 seconds East, 1141.83 feet** to a point lying 20.00 feet from a concrete monument found, said concrete monument being a marker online at the top of bank of an existing ditch and said point marking the centerline of said existing ditch being the common corner for these lands, lands now or formerly of Judy L. Pfeiffer and lands now or formerly of Garden Estates, Inc.; thence by and with these lands and lands now or formerly of Garden Estates, Inc.; **South 32 degrees, 46 minutes, 47 seconds West, 813.49 feet** to a concrete monument found, said concrete monument being a corner for this Parcel, Garden Estates, Inc and lands now or formerly of Donald F. and Beatrice Moore;

thence by and with these lands and lands now or formerly of Donald F. and Beatrice Moore the following four (4) courses and distances;

1. **North 80 degrees, 17 minutes, 45 seconds West, 617.10 feet to a concrete monument found, adjacent to a large stone found;**
2. **South 18 degrees, 27 minutes, 15 seconds West, 1084.05 feet to a concrete monument found;**
3. **North 81 degrees, 59 minutes, 50 seconds West, 774.36 feet to a concrete monument found;**
4. **North 82 degrees, 25 minutes, 18 seconds West, 1435.00 feet to a concrete monument found in the centerline of an existing ditch;**

Said concrete monument marking these lands, lands now or formerly Donald F. and Beatrice Moore and lands now or formerly of The State of Delaware; thence running along the centerline of the existing ditch, by and with these lands and lands now or formerly The State of Delaware the following courses and distances:

1. **North 00 degrees, 24 minutes, 03 seconds West, 946.04 feet to a point in the centerline of an existing ditch;**
2. **North 59 degrees, 10 minutes, 27 seconds West, 198.70 feet to a point in the centerline of an existing ditch;**
3. **North 61 degrees, 11 minutes, 20 seconds West, 231.29 feet to a point in the centerline of an existing ditch;**

Thence leaving the existing ditch and running by and with the aforementioned lands the following four (4) courses and distances:

1. **North 81 degrees, 59 minutes, 15 seconds East, 170.49 feet to an iron pipe found;**
2. **North 40 degrees, 54 minutes, 27 seconds East, 260.71 feet to an iron pipe found;**
3. **North 31 degrees, 37 minutes, 07 seconds East, 1019.18 feet to a concrete monument found;**
4. **North 09 degrees, 00 minutes, 12 seconds East, 628.60 feet to a point;**

Said point being the corner for the aforementioned lands and lands now or formerly of Muhammad Z. Gondal; thence by and with these lands and the lands now or formerly Muhammad Z. Gondal, **South 62 degrees, 53 minutes, 03 seconds East, 2177.86 feet** to a point lying 25 feet from the edge of an existing 25 foot right-of-way previously recorded in Deed Book 739 Page 36 in favor of Parcel 21.00: said point being the other corner of said existing 25-foot right-of-way easement and a corner for these lands, other lands now or formerly of ML Joseph Sand & Gravel and lands now or formerly of Muhammad Z. Gondal; thence by and with this Parcel and other lands now or formerly of ML Joseph Sand & Gravel, **South 62 degrees, 53 minutes, 03 seconds East, 50 feet** to a concrete monument found, said concrete monument being the **Point of Beginning** for this description.

This Parcel contains **6,852,582 square feet** or **157.31 acres** of land, more or less, as shown on a plat prepared by **Pennoni Associates Inc.**, titled "**Boundary Survey** dated 27 June 2018.

The combined Parcels (22.01 and 21.00) contain **6,915,188 square feet** or **158.75 acres** of land, more or less, as shown on a plat prepared by **Pennoni Associates Inc.**, titled "**Boundary Survey** dated 27 June 2018.



**REPORT OF
BORROW PIT EVALUATION SERVICES**

**ROUTE 404 BORROW PIT
GEORGETOWN, DELAWARE**

**PREPARED FOR
M. L. JOSEPH SAND & GRAVEL**

**JULY 19, 2018
PROJECT NO.: JDH-10/18/236**



JOHN D. HYNES & ASSOCIATES, INC.

*Geotechnical and Environmental Consultants
Monitoring Well Installation
Construction Inspection and Materials Testing*

July 19, 2018

Mr. Ken Adams
M. L. Joseph Sand & Gravel
25136 Dupont Highway
Georgetown, Delaware 19947

Re: Report of Borrow Pit Evaluation Services
Route 404 Borrow Pit
Georgetown, Delaware
Project No.: JDH-10/18/236


Dear Mr. Adams:


John D. Hynes & Associates, Inc. has completed the authorized subsurface exploration, laboratory testing and borrow pit evaluation services for the Route 404 Borrow Pit project located in Georgetown, Delaware. Our services were performed, generally, in accordance with our proposal dated May 7, 2018 outlining the specified services.


This report describes the exploration methods employed, exhibits the data obtained and presents our evaluations. In summary, marketable materials were found at all of the drilling locations. Most of the material encountered in the borings are SANDS with various amounts of silt and gravel. The types of materials and the locations of various materials are detailed in this report.


We appreciate the opportunity to be of service to you. If you have any questions regarding the contents of this report or if we may be of further assistance, please contact our office.

Respectfully,
JOHN D. HYNES & ASSOCIATES, INC.


Jason A. Lindsey, P.E.
Project Engineer
JAL: JDH/jsl




John D. Hynes, P.E.
President





**REPORT OF
BORROW PIT EVALUATION SERVICES**

**ROUTE 404 BORROW PIT
GEORGETOWN, DELAWARE**

**PREPARED FOR
M. L. JOSEPH SAND & GRAVEL**

**JULY 19, 2018
PROJECT NO.: JDH-10/18/236**



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PURPOSE AND SCOPE

The subsurface exploration study was performed to evaluate the subsurface conditions with respect to the following:

1. Soil and groundwater conditions at the proposed borrow pit area; and
2. Comparison of soil conditions and test results with MDSHA, DeIDOT, ASTM and Golf Course SAND material standards and specifications.

The boring logs present the estimated (visual) soil classifications in accordance with the USCS and AASHTO soil classification systems. Refer to the boring log sheets in the Appendix for the subsurface conditions at each boring location.

EXISTING SITE CONDITIONS

As shown on the "Project Location Map" (Drawing JDH-10/18/236-A) in the Appendix, the project site is located south of Delaware Route 404 in Georgetown, Delaware. The parcel is an existing fallow farm field. Topographically, the site is relatively flat. The site is located in a rural area and is generally surrounded by wooded areas and other farms.

PURPOSE AND SCOPE

The subsurface study was performed to evaluate the availability of sands and gravels at the proposed borrow pit area. Seven test borings were spread out over the proposed Route 404 borrow pit area. Test borings were drilled and sieve analysis tests were performed to determine the gradation of the subsurface soil materials between the ground surface and approximately 65.5 to 90.5 feet below grade. Soil material classifications and gradations were compared to: ASTM, Maryland State Highway Administration (SHA) and Delaware Department of Transportation (D.O.T). materials, specifications for Fine and Coarse Aggregates for Asphalt and Portland Cement Concrete, Bank Run Gravel, Dense Graded Aggregate, Masonry Sand, Select Borrow and Fill Materials, and Golf Course Sand.

FIELD EXPLORATION AND STUDY

In order to determine the nature of the subsurface conditions at the proposed borrow pit location, 15 test borings, designated B-1 through B-15, were drilled May 21 and June 8, 2018 at the approximate locations indicated on the attached Boring Location Plan (Drawing JDH-10/18/236-B) in the Appendix. Test boring B-5 was drilled to a depth of 55.5 feet below grade, test borings B-7 and B-8 were drilled to depths of 90.5 feet below grade, and the balance of the test borings were drilled to depths of 65.5 feet below grade. All borings were drilled using a track-mounted GeoProbe 7822 DT drill rig and a track-mounted GeoProbe 3230 drill rig. Test borings B-7 and B-8 were extended to 90.5 feet to explore for a clay layer, as requested.

Soil sampling and testing were carried out in accordance with ASTM Specification D-1586. A brief description of our field procedures is included in the Appendix. The results of all boring and sampling operations are shown on the boring logs.

Samples of the subsurface soils were examined by our engineering staff and were visually classified in accordance with the Unified Soil Classification System (USCS) and the AASHTO Soil Classification System (AASHTO). The estimated USCS symbols appear on the boring logs. Keys to the systems nomenclature are provided in the Appendix



of this report. Included in the Appendix are reference sheets which define the terms and symbols used on the boring logs and explain the Standard Penetration Test procedures.

We note that the test boring records represent our interpretation of the field data based on visual examination. Indicated interfaces between materials may be gradual.

The field exploration data was supplemented with laboratory testing data. The laboratory at John D. Hynes & Associates, Inc. performed 30 Sieve Analysis tests. Fifteen of the sieve analysis tests were composite samples. A portion from each sample was combined from each boring to make a composite sample that was tested. Sieve Analysis results are included in the Laboratory Test Results Tables in the Appendix.

In addition to the geotechnical laboratory testing, three samples were sent to Phase Separation Science in Baltimore, Maryland for Total Iron content. The results are shown below and are also included in the Appendix.

Boring No.	Sample No.	Depth (ft.)	Iron Content (ppm)
B-12	S-10	39-40.5	9600
B-14	S-12	49-50.5	15000
B-3	S-6	19-20.5	25000

We made a composite sample by mixing soils from 2 to 5 feet from each test boring. The composite sample was shipped to Froehling and Robertson, Inc. of Timonium, Maryland for Corrosivity Testing. The Corrosivity testing includes pH, Resistivity, Redox Potential, Sulfate Ion Content, Chloride Ion Content, and Sulfide Ion Content. The test results are included in the Appendix.

SUBSURFACE CONDITIONS

We encountered approximately 8 to 12 inches of organic bearing soil at the ground surface at the boring locations. Other thicknesses of organic bearing soils may be encountered at other locations on site.

Below the organic bearing soil horizon, soils were visually classified in accordance with USCS and AASHTO classification systems. The predominant material in the upper 65.5 feet of the borings are SANDs with trace to little silt (USCS: SP, SP-SM, SM, AASHTO: A-3, A-2-4). The subsurface soils consisted of interbedded Silty SAND (SM, SM/ML, and SP-SM, A-2-4), SANDs (SP, A-3), Clayey SANDs (SC, A-2-6), Clayey SILT (ML, A-4, A-5), and Silty CLAY (CL, A-6) to boring termination depths. In general, the clay and silt layers were typically encountered in the upper 8.5 feet in the test borings. We did not encounter a clay layer at the bottom of any of the borings including the 90.5 foot borings.

In the borings, sands were characterized by Standard Penetration Test (SPT) values (N-values) of 1 blow per foot to 5 blows per 6 inches. This range of penetration resistance indicates in-place relative densities of very loose to very dense. N-values in the cohesive materials ranged between 2 and 7 blows per foot indicating in-place consistencies of very soft to medium stiff.

Groundwater was encountered at depths of 4 to 17 feet in the test borings. Groundwater elevations may vary at other times during the year depending on the amount of local precipitation and the extent of local surface development.



EVALUATIONS

As stated earlier in this report, 30 sieve analysis tests were performed on representative materials obtained for the test borings. The results of the sieve analysis tests were compared to Maryland and Delaware Department of Transportation Specifications for Highway Construction materials, ASTM Specifications and Golf Course Sand specifications. The sieve analysis results and conformance to Maryland and Delaware DOT requirements, ASTM Specifications, and Golf Course Sand specifications are included in the Appendix and are discussed below.

Sieve Analysis tests were not performed on every sample obtained from the field exploration. Only representative soil samples were tested. For the samples not tested, materials similar to tested samples were visually classified and compared to the tested samples. The estimated classifications and limited number of test borings should be considered when evaluating the feasibility of mining operations to produce marketable materials.

In addition, we have provided Sieve Analysis Tables in the Appendix for comparison with the reference specifications. We note that there are variations in the gradation results from similar soils, and that some similar samples may meet a given specification while others are close but do not meet it. In many cases, the materials are out of conformance of the required gradation, but could be brought into compliance by being sieved/washed or blended with other material.

Delaware D.O.T. Specifications

Nearly all tested samples met the gradation requirements for *Borrow Type A, B, C, and D*. Of the 30 samples tested, 19 met the requirements for *Borrow Type E*. In comparison to the *Borrow Type G* specifications, 21 samples met the *Type V* requirements, and 19 samples met the requirements for *Type VI*. Two tested samples met the DelDOT requirements for Fine Aggregate. Five of the tested samples met the requirements for DelDOT Asphalt Mixtures *Types D and E*. Some samples will meet the specification requirements for concrete and asphalt fine aggregate by removing the gravels only, and other materials will meet the requirements by, also, removing fines.

Referring to the Delaware Department of Transportation manual entitled “Rules and Regulations for Subdivision Streets”, the manual categorizes soils as follows:

Good Soils – all soils within the A-1, A-2 and A-3 AASHTO classifications.

Poor Soils – all soils within the A-4, A-5, A-6 and A-7 AASHTO classifications.

AASHTO soil types A-1 (coarse sands), A-2 (sands with little fines) and A-3 (fine sands) are classified as coarse grained materials, with a subgrade rating of excellent to good. Soil types A-4 and A-6 (silts and clays) are classified as fine grained materials, with a subgrade rating of fair to poor. Based on the visual classifications supplemented by laboratory data, nearly all soils encountered in the borings are A-1, A-2, or A-3 category soils and would provide good to excellent subgrade materials.

Maryland DOT Specifications

Three of the tested samples met the gradation requirements for Maryland DOT: *Fine Aggregate for – Sand, Mortar & Epoxies, Portland Cement Concrete and Underdrain, and Lightweight Portland Cement Concrete*. Ten of the tested samples met the requirements for *Bank Run Gravel – Subbase*, and six sample met the requirements for *Bank Run Gravel – Base*.



ASTM Specifications

Five of the tested samples met the requirements for *ASTM C-144 Masonry Grout (Fine Aggregate Size #1)*, two samples met the requirements for *ASTM C-404 Masonry Grout (Fine Aggregates Size #2)*, and one sample met the requirements for *ASTM C-404 Masonry Grout (Natural Sand)*.

Golf Course Sand

None of the tested samples met the requirements for golf course sand. The golf course sand can be manufactured by washing and sieving.

Our comparisons are for materials as they are “in place” compared to the described specifications. We point out that some soil particles will wash out of the soil mass during the removal process (e.g. mechanical excavation, and hydraulic dredging). Also note that some products such as concrete sand, masonry sand and golf course sand can be manufactured by the use of a screening and/or washing operation.

REMARKS

This report has been prepared solely and exclusively for M.L. Joseph Sand & Gravel to provide guidance in identifying the types of borrow material available at the proposed Route 404 Borrow Pit site in Georgetown, Delaware. This report has not been developed to meet the needs of others, and application of this report for other than its intended purpose could result in substantial difficulties. The Consulting Engineer cannot be held accountable for any problems which occur due to the application of this report to other than its intended purpose.

These analyses and recommendations are, of necessity, based on the concepts made available to us at the time of the writing of this report and on-site conditions, surface and subsurface that existed at the time the exploratory borings were drilled. Further assumption has been made that the limited exploratory borings, in relation both to the areal extent of the site and to depth, are representative of conditions across the site.

Our professional services have been performed, our findings obtained and our recommendations prepared in accordance with generally accepted engineering principles and practices.



APPENDIX

1. Investigative Procedures
2. Project Location Map
3. Boring Location Plan
4. Boring Logs
5. Laboratory Test Results
6. Analytical Test Results
7. Table 1: MD SHA Specifications
8. Table 2: DelDOT Specifications
9. Table 3: ASTM Specifications
10. Table 4: Material Specifications – MDSHA
11. Unified Soil Classification Sheet
12. AASHTO Classification Sheet
13. Field Classification Sheet
14. Information Sheet



INVESTIGATIVE PROCEDURES

SOIL TEST BORINGS

Soil drilling and sampling operations were performed in accordance with ASTM Specification D-1586. The borings were advanced by mechanically turning continuous hollow stem auger flights into the ground. At regular intervals, samples were obtained with a standard 1.4 inch I.D., 2.0 inch O.D. splitspoon sampler. The sampler was first seated 6 inches to penetrate any loose cuttings and then driven an additional foot with blows of a 140-pound hammer falling 30 inches. The number of hammer blows required to drive the sampler the final foot is the "Standard Penetration Resistance". The penetration resistance, when properly evaluated, is an index to the soil's strength, density and behavior under applied loads. The soil descriptions and penetration resistances for each boring are presented on the Test Boring Records in the Appendix.

SOIL CLASSIFICATION

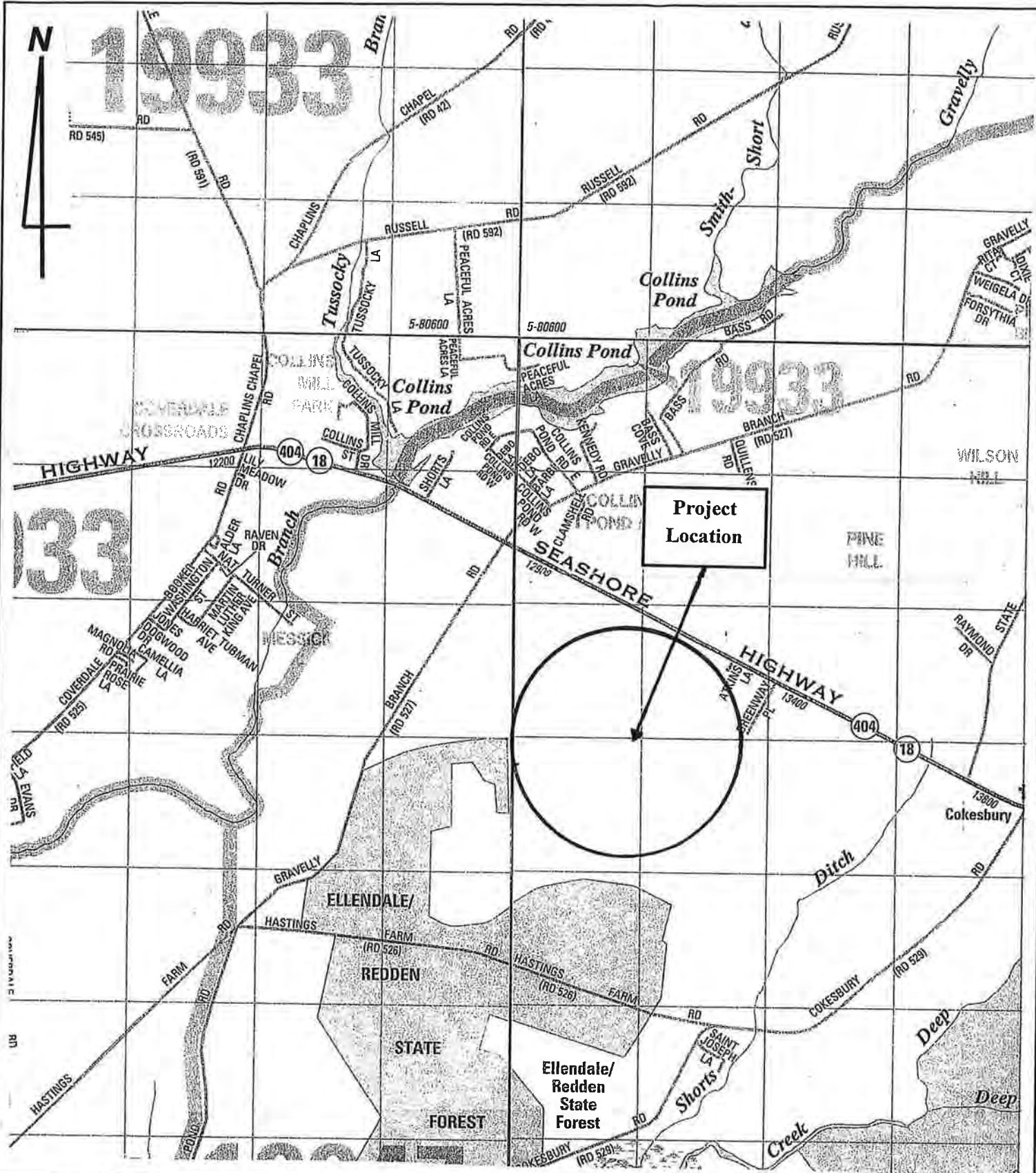
Soil classifications provide a general guide to the engineering properties of various soil types and enable the engineer to apply his past experience to current problems. In our investigation, jar samples obtained during drilling operations are examined in our laboratory and visually classified by the geotechnical engineer in accordance with ASTM Specification D-2488. The soils are classified according to the AASHTO or Unified Classification System (ASTM D-2487). Each of these classification systems and the in-place physical soil properties provides an index for estimating the soil's behavior.

SIEVE ANALYSIS TEST

Gradational analysis tests were performed to determine the particle size and distribution of the samples tested. The grain size distribution of soils coarser than a No. 200 sieve is determined by passing the sample through a standard set of nested sieves. The percentage of materials passing the No. 200 sieve is determined by washing the material over a No. 200 sieve. These tests are in accordance with ASTM D-421, D-422 and D-1140. The results are presented in the Appendix to our report.

NATURAL MOISTURE TEST

Portions from representative soil samples obtained during drilling operations were selected for Natural Moisture Content testing. The Natural Moisture Content Test determines the moisture content of soils by drying the sample in an oven with a standard drying temperature of 110 °C. The loss of mass drying the sample, is used to determine the moisture content into the soil. The natural moisture content of the sample is calculated in percentage as the weight of water divided by the weight of dry soil times 100. The natural moisture content of soils is determined in accordance with ASTM Specification D-2216.



JOHN D. HYNES & ASSOCIATES, INC.

32185 Beaver Run Drive • Salisbury, Maryland 21804
410-546-6462 / Fax: 410-548-5346

Date: May 23, 2018

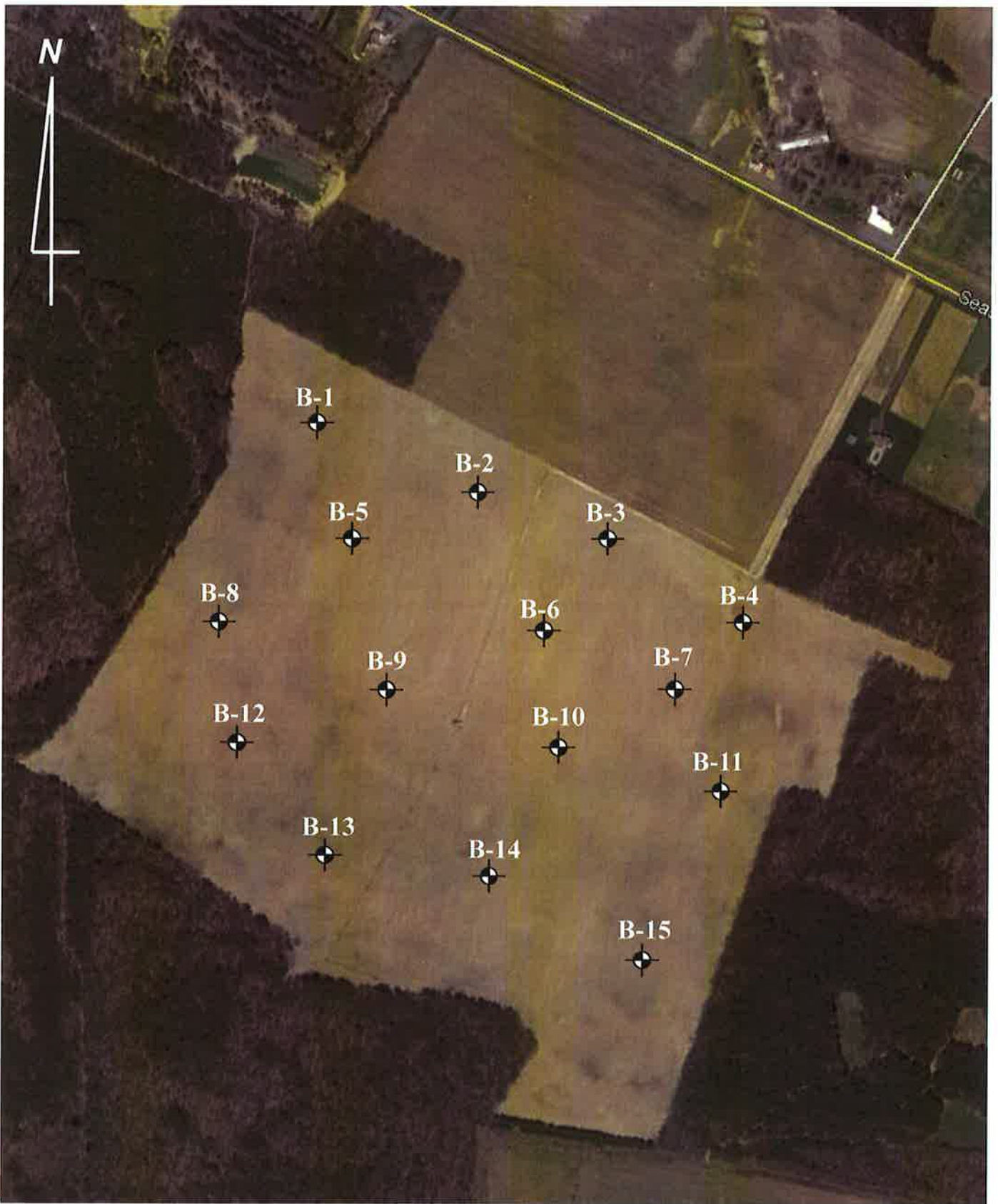
Scale: 1 in. = 2,000 ft.

Drawn: ADC Maps

Project Location Map
Route 404 Borrow Pit
Georgetown, Maryland

DWG. No.

JDH-10/18/236-A



JOHN D. HYNES & ASSOCIATES, INC.

32185 Beaver Run Drive • Salisbury, Maryland 21804

410-546-6462 / Fax: 410-548-5346

Date: May 23, 2018

Scale: 1 in. ≈ 900 ft.

Drawn: Google

Boring Location Plan
Route 404 Borrow Pit
Georgetown, Delaware

DWG. No.

JDH-10/17/236-B



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LOG OF BORING B-1

(Page 1 of 2)

M.L. Joseph Sand & Gravel
25136 Dupont Highway
Georgetown, Delaware 19947
Route 404 Borrow Pit
Project No.: JDH-10/18/236

Date Completed: : May 22, 2018
Logged By: : J. Lindsey
Drilled By: : B. Hynes
Drilling Method: : HSA (Geoprobe 7822 DT)
Total Depth: : 65.5 feet

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	Remarks
0	Brown, wet, very loose to medium dense, fine to medium SAND, with little silt, trace clay		SP-SM	1	1-2-2-2	Scale 1" ~ 6.2 feet
2				2	4-6-6	Approximately 12 inches of organic bearing soil was encountered at the ground surface
6	Brown, wet, very loose to medium dense, fine to medium SAND, with trace silt		SP	3	2-2-2	Groundwater was encountered at 10 feet during drilling operations
8				4	5-7-7	At completion, water was at 4 feet; boring caved in at 12 feet.
12	Brown, saturated, loose to medium dense, fine to medium sand, with trace silt, trace fine gravel		SP	5	3-3-5	
14				6	5-7-9	
16				7	3-7-8	
18				8	4-6-8	
20				9	5-5-9	
22	Light brown, wet, medium dense, fine to medium SAND, with trace silt		SP	10	4-6-8	
24				11	5-6-7	
26				12	5-6-9	
28	Brown, saturated, medium dense to dense, fine to coarse SAND, with trace silt		SP			
30						



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LOG OF BORING B-1


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M.L. Joseph Sand & Gravel
25136 Dupont Highway
Georgetown, Delaware 19947

Route 404 Borrow Pit

Project No.: JDH-10/18/236

Date Completed: : May 22, 2018
 Logged By: : J. Lindsey
 Drilled By: : B. Hynes
 Drilling Method: : HSA (Geoprobe 7822 DT)
 Total Depth: : 65.5 feet

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	Remarks
50	Brown, saturated, medium dense to dense, fine to coarse SAND, with trace silt		SP	12	5-6-9	
52				13	4-13-14	
54				14	10-12-14	
56				15	10-14-17	
58						
60						
62						
64						
66	Boring terminated at 65.5 feet.					
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LOG OF BORING B-2

(Page 1 of 2)

M.L. Joseph Sand & Gravel
25136 Dupont Highway
Georgetown, Delaware 19947

Route 404 Borrow Pit
Project No.: JDH-10/18/236

Date Completed: : May 22, 2018
 Logged By: : J. Lindsey
 Drilled By: : B. Hynes
 Drilling Method: : HSA (Geoprobe 7822 DT)
 Total Depth: : 65.5 feet

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	Remarks
0	Brown, wet, very loose, fine to medium SAND, with trace silt		SP	1	1-2-1-1	Scale 1" ~ 6.2 feet
2	Brown, wet, very loose, fine to medium SAND, with some clay, trace silt		SC	2	1-1-1	Approximately 8 inches of organic bearing soil was encountered at the ground surface.
4	Brown, wet, loose, fine to medium SAND, with some silt, trace clay		SM	3	4-4-4	Groundwater was encountered at 17 feet during drilling operations. At completion, water was at 5 feet; boring caved in at 16 feet.
6	Brown, wet, loose, fine to medium SAND, with some silt, trace clay			4	3-3-4	
12	Brown, wet, loose, fine to coarse SAND, with little fine gravel, trace to little silt		SP-SM	5	3-4-4	
14	Brown, wet, loose, fine to coarse SAND, with little fine gravel, trace to little silt			6	4-4-6	
18	Brown, saturated, loose, fine to coarse SAND, with trace silt		SP	7	2-2-5	
20	Brown, saturated, loose, fine to coarse SAND, with trace silt			8	2-3-4	
22	Brown, saturated, loose, fine to coarse SAND, with trace silt			9	4-4-6	
24	Brown, saturated, loose, fine to coarse SAND, with trace silt			10	6-7-7	
26	Brown, saturated, loose, fine to coarse SAND, with trace silt			11	3-9-6	
28	Brown, saturated, loose, fine to coarse SAND, with trace silt			12	5-7-10	
30	Light brown, saturated, medium dense, fine to medium SAND, with trace silt		SP			
32	Light brown, saturated, medium dense, fine to medium SAND, with trace silt					
34	Light brown, saturated, medium dense, fine to medium SAND, with trace silt					
36	Light brown, saturated, medium dense, fine to medium SAND, with trace silt					
38	Light brown, saturated, medium dense, fine to medium SAND, with trace silt					
40	Light brown, saturated, medium dense, fine to medium SAND, with trace silt					
42	Light brown, saturated, medium dense, fine to medium SAND, with trace silt					
44	Light brown, saturated, medium dense, fine to medium SAND, with trace silt					
46	Light brown, saturated, medium dense, fine to medium SAND, with trace silt					
48	Light brown, saturated, medium dense, fine to medium SAND, with trace silt					
50	Light brown, saturated, medium dense, fine to medium SAND, with trace silt					



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LOG OF BORING B-2

(Page 2 of 2)

M.L. Joseph Sand & Gravel
25136 Dupont Highway
Georgetown, Delaware 19947

Route 404 Borrow Pit
Project No.: JDH-10/18/236

Date Completed: : May 22, 2018
 Logged By: : J. Lindsey
 Drilled By: : B. Hynes
 Drilling Method: : HSA (Geoprobe 7822 DT)
 Total Depth: : 65.5 feet

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	Remarks
50	Light brown, saturated, medium dense, fine to medium SAND, with trace silt		SP	12	5-7-10	
52				13	10-10-11	
54				14	11-11-18	
56				15	7-7-9	
58	Boring terminated at 65.5 feet.					
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LOG OF BORING B-3

(Page 1 of 2)

M.L. Joseph Sand & Gravel
25136 Dupont Highway
Georgetown, Delaware 19947

Route 404 Borrow Pit
Project No.: JDH-10/18/236

Date Completed: May 29, 2018
 Logged By: J. Lindsey
 Drilled By: B. Hynes
 Drilling Method: HSA (Geoprobe 7822 DT)
 Total Depth: 65.5 feet

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	Remarks
0	Brown, wet, very loose to loose, fine to medium SAND, with some silt, trace clay		SM	1	2-2-3-2	Scale 1" ~ 6.2 feet Approximately 12 inches of organic bearing soil was encountered at the ground surface. Groundwater was encountered at 8.5 feet during drilling operations.
2				2	1-3-3	
4				3	2-2-4	
6	Brown, saturated, very loose, fine to medium SAND, with little silt		SP-SM	4	1-2-3	
8				5	1-3-4	
10	Brown, saturated, loose, fine to coarse SAND, with trace silt, trace fine gravel		SP	6	1-3-5	
12				7	2-2-3	
14				8	2-3-3	
16	Light brown, saturated, very loose to medium dense, fine to medium SAND, with trace silt		SP	9	2-5-7	
18				10	10-12-15	
20				11	4-6-8	
22	Brown, saturated, medium dense, fine to coarse SAND, with trace silt		SP	12	5-5-9	
24						
26						
28	Brown, saturated, medium dense, fine to medium SAND, with trace silt		SP			
30						
32						
34	Brown, saturated, medium dense to dense, fine to coarse SAND, with trace silt		SP			
36						
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LOG OF BORING B-3


(Page 2 of 2)

M.L. Joseph Sand & Gravel
25136 Dupont Highway
Georgetown, Delaware 19947

Route 404 Borrow Pit

Project No.: JDH-10/18/236

Date Completed: : May 29, 2018
 Logged By: : J. Lindsey
 Drilled By: : B. Hynes
 Drilling Method: : HSA (Geoprobe 7822 DT)
 Total Depth: : 65.5 feet

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	Remarks
50	Brown, saturated, medium dense to dense, fine to coarse SAND, with trace silt		SP	12	5-5-9	
52						
54				13	3-5-7	
56						
58				14	10-18-29	
60						
62						
64				15	9-15-20	
66	Boring terminated at 65.5 feet.					
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LOG OF BORING B-4

(Page 1 of 2)

M.L. Joseph Sand & Gravel
25136 Dupont Highway
Georgetown, Delaware 19947

Route 404 Borrow Pit
Project No.: JDH-10/18/236

Date Completed: : May 29, 2018
 Logged By: : J. Lindsey
 Drilled By: : B. Hynes
 Drilling Method: : HSA (Geoprobe 7822 DT)
 Total Depth: : 65.5 feet

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	Remarks	
0	Brown, wet, very loose, fine to medium SAND, with some silt		SM	1	2-2-3-3	Scale 1" ~ 6.2 feet	
2	Light brown, wet, loose to very loose, fine to coarse SAND, with little silt, trace clay		SP-SM	2	1-2-4	Approximately 12 inches of organic bearing soil was encountered at the ground surface.	
4				3	1-1-3		
6	Light gray, saturated, loose, fine to coarse SAND, with little silt		SP-SM	4	2-4-6	Groundwater was encountered at 8.5 feet during drilling operations.	
8				5	4-4-5		
10	Light gray, saturated, loose to very loose, fine to coarse SAND, with trace silt		SP	6	1-1-2		
12				7	3-5-5		
14	Brown, saturated, medium dense, fine to coarse SAND, with trace silt		SP	8	3-5-10		
16				9	3-6-7		
18	Brown, saturated, medium dense to very dense, fine to medium SAND, with trace silt		SP	10	3-7-10		
20				11	4-6-8		
22			SP	12	4-5-8		
24							
26							
28							
30							
32							
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40							
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50							



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LOG OF BORING B-4

(Page 2 of 2)

M.L. Joseph Sand & Gravel
25136 Dupont Highway
Georgetown, Delaware 19947

Route 404 Borrow Pit
Project No.: JDH-10/18/236

Date Completed: : May 29, 2018
 Logged By: : J. Lindsey
 Drilled By: : B. Hynes
 Drilling Method: : HSA (Geoprobe 7822 DT)
 Total Depth: : 65.5 feet

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	Remarks
50	Brown, saturated, medium dense to very dense, fine to medium SAND, with trace silt		SP	12	4-5-8	
52						
54				13	2-5-6	
56						
58						
60				14	9-23-27	
62						
64				15	10-25-29	
66	Boring terminated at 65.5 feet.					
68						
70						
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LOG OF BORING B-5

(Page 1 of 2)

M.L. Joseph Sand & Gravel
25136 Dupont Highway
Georgetown, Delaware 19947

Route 404 Borrow Pit
Project No.: JDH-10/18/236

Date Completed: : May 22, 2018
 Logged By: : J. Lindsey
 Drilled By: : B. Hynes
 Drilling Method: : HSA (Geoprobe 7822 DT)
 Total Depth: : 55.5 feet

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	Remarks
0	Brown, wet, very loose, fine to medium SAND, with little silt		SP-SM	1	1-2-3-2	Scale 1" ~ 6.2 feet
2	Brown, wet, medium stiff, clayey SILT, with little fine to medium sand		ML	2	3-3-3	Approximately 12 inches of organic bearing soil was encountered at the ground surface.
4	Brown, wet, medium dense, fine to medium SAND, with little fine to medium gravel, trace silt		SP	3	3-5-7	Groundwater was encountered at 12 feet during drilling operations.
6	Brown, wet, loose, fine to medium SAND, with some silt		SM	4	3-5-5	At completion, water was at 6 feet; boring caved in at 12 feet.
10	Brown, saturated, very loose to medium dense, fine to coarse SAND, with trace silt, trace fine gravel		SP	5	1-1-1	
14				6	3-4-4	
18				7	4-4-5	
22				8	2-3-6	
26				9	3-4-5	
30				10	1-2-4	
34				11	7-9-13	
38				12	4-6-13	



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LOG OF BORING B-5

(Page 2 of 2)

M.L. Joseph Sand & Gravel
25136 Dupont Highway
Georgetown, Delaware 19947

Route 404 Borrow Pit
Project No.: JDH-10/18/236

Date Completed: : May 22, 2018
 Logged By: : J. Lindsey
 Drilled By: : B. Hynes
 Drilling Method: : HSA (Geoprobe 7822 DT)
 Total Depth: : 55.5 feet

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	Remarks
50	Brown, saturated, very loose to medium dense, fine to coarse SAND, with trace silt, trace fine gravel		SP	12	4-6-13	
52						
54				13	4-7-9	
56	Boring terminated at 55.5 feet.					
58						
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**HYNES
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ASSOCIATES**

LOG OF BORING B-6

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M.L. Joseph Sand & Gravel
25136 Dupont Highway
Georgetown, Delaware 19947

Route 404 Borrow Pit
Project No.: JDH-10/18/236

Date Completed: : May 22, 2018
 Logged By: : J. Lindsey
 Drilled By: : B. Hynes
 Drilling Method: : HSA (Geoprobe 7822 DT)
 Total Depth: : 65.5 feet

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	Remarks
0	Brown, wet to saturated, very loose to medium dense, fine to medium SAND, with little silt		SP-SM	1	1-2-3-2	Scale 1" ~ 6.2 feet
2				2	3-3-3	Approximately 12 inches of organic bearing soil was encountered at the ground surface.
4				3	3-5-7	Groundwater was encountered at 8 feet during drilling operations.
8	Brown, saturated, loose, fine to medium SAND, with some silt		SM	4	3-5-5	At completion, water was at 5 feet; boring caved in at 11.5 feet.
10						
12	Brown, saturated, very loose to loose, fine to coarse SAND, with trace silt		SP	5	1-1-1	
14				6	3-4-4	
16				7	4-4-5	
18				8	2-3-6	
20	Brown, saturated, loose, fine to medium SAND, with trace silt		SP	9	3-4-5	
22				10	1-2-4	
24	Brown, saturated, loose to medium dense, fine to coarse SAND, with trace silt		SP	11	7-9-13	
26				12	4-6-13	
28						



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LOG OF BORING B-6

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M.L. Joseph Sand & Gravel
25136 Dupont Highway
Georgetown, Delaware 19947

Route 404 Borrow Pit
Project No.: JDH-10/18/236

Date Completed: : May 22, 2018
Logged By: : J. Lindsey
Drilled By: : B. Hynes
Drilling Method: : HSA (Geoprobe 7822 DT)
Total Depth: : 65.5 feet

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	Remarks
50	Brown, saturated, loose to medium dense, fine to coarse SAND, with trace silt		SP	12	4-6-13	
52				13	4-7-9	
54				14	11-13-13	
56				15	12-11-15	
58	Boring terminated at 65.5 feet.					
60						
62						
64						
66						
68						
70						
72						
74						
76						
78						
80						
82						
84						
86						
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LOG OF BORING B-7

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M.L. Joseph Sand & Gravel
25136 Dupont Highway
Georgetown, Delaware 19947

Route 404 Borrow Pit
Project No.: JDH-10/18/236

Date Completed: June 1, 2018
 Logged By: J. Lindsey
 Drilled By: M. Hynes
 Drilling Method: HSA (Geoprobe 7822 DT)
 Total Depth: 90.5 feet

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	Remarks
0	Brown, wet to saturated, very loose to loose, fine to medium SAND, with trace to little silt		SP-SM	1	1-1-WOH/12"	Scale 1" ~ 6.2 feet Approximately 12 inches of organic bearing soil was encountered at the ground surface.
2				3-4-4		
4	Brown, saturated, loose to medium dense, fine to medium SAND, with little silt, trace clay		SP-SM	3	1-4-6	Groundwater was encountered at 4 feet during drilling operations.
6				3-5-6		
8	Light brown, saturated, loose to medium dense, fine to medium SAND, with trace silt		SP	4	2-3-3	
10				2-3-3		
12				2-4-4		
14				3-3-5		
16				3-5-5		
18				3-6-7		
20						
22						
24						
26						
28	Brown, saturated, loose to medium dense, fine to coarse SAND, with trace silt		SP	7	1-2-4	
30				5-6-8		
32						
34						
36						
38						
40						
42						
44						
46						
48						
50						



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LOG OF BORING B-7

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M.L. Joseph Sand & Gravel
25136 Dupont Highway
Georgetown, Delaware 19947

Route 404 Borrow Pit

Project No.: JDH-10/18/236

Date Completed: June 1, 2018
 Logged By: J. Lindsey
 Drilled By: M. Hynes
 Drilling Method: HSA (Geoprobe 7822 DT)
 Total Depth: 90.5 feet

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	Remarks
50	Brown, saturated, loose to medium dense, fine to coarse SAND, with trace silt		SP	12	5-6-8	
52				13	5-7-7	
54				14	4-7-7	
56				15	17-27-50/5"	
58	Brown, saturated, very dense, fine to medium SAND, with trace silt, trace fine gravel		SP	16	7-13-14	
60				17	8-14-25	
62				18	7-12-19	
64				19	16-17-23	
66	Light brown, saturated, medium dense to dense, fine to medium SAND, with trace silt		SP	20	9-11-14	
68						
70						
72						
74	Boring terminated at 90.5 feet.					
76						
78						
80						
82						
84						
86						
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100						



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LOG OF BORING B-8

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M.L. Joseph Sand & Gravel
25136 Dupont Highway
Georgetown, Delaware 19947

Route 404 Borrow Pit
Project No.: JDH-10/18/236

Date Completed: : June 8, 2018
 Logged By: : J. Redding
 Drilled By: : M. Hynes
 Drilling Method: : HSA (Geoprobe 3230)
 Total Depth: : 90.5 feet

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	Remarks
0	Light brown, wet, very loose, fine to medium SAND, with little to some silt		SM	1	1-2-2-2	Scale 1" ~ 7.4 feet
2	Light brown, wet, very loose, fine to medium SAND, with little silt, trace clay		SM	2	2-2-3	Approximately 9 inches of organic bearing soil was encountered at the ground surface.
4	Light brown, wet, very loose, fine to medium sand, with little silt, little clay		SM-SC	3	2-3-3	Groundwater was encountered at 13 feet during drilling operations.
6	Light brown, wet, very loose, fine to medium SAND, with some silt		SM	4	1-1/12"	
8	Orange-brown, wet to saturated, loose, fine to coarse SAND, with little fine gravel, trace to little silt		SP-SM	5	3-2-4	
10	Light brown, saturated, medium dense, fine to coarse SAND, with little to some silt, trace fine gravel		SM	6	2-4-8	
12	Light brown, saturated, medium dense, fine to coarse SAND, with little silt, trace fine gravel		SM	7	2-5-8	
14	Light brown, saturated, loose to medium dense, fine to coarse SAND, with little fine gravel, trace silt		SP	8	3-3-3	
16				9	5-5-8	
18	Orange-brown, saturated, loose to medium dense, fine to coarse SAND, with trace silt		SP	10	2-3-5	
20				11	4-4-7	
22	Orange-brown, saturated, medium dense, fine to coarse SAND, with trace to little fine gravel, trace silt		SP-SM	12	5-8-11	



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LOG OF BORING B-8

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M.L. Joseph Sand & Gravel
25136 Dupont Highway
Georgetown, Delaware 19947

Route 404 Borrow Pit
Project No.: JDH-10/18/236

Date Completed: June 8, 2018
 Logged By: J. Redding
 Drilled By: M. Hynes
 Drilling Method: HSA (Geoprobe 3230)
 Total Depth: 90.5 feet

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	Remarks	
50	Orange-brown, saturated, medium dense, fine to coarse SAND, with trace to little fine gravel, trace silt		SP-SM	12	5-8-11		
52				13			
54	Orange-brown, saturated, medium dense, fine to coarse SAND, with trace silt		SP	14	4-7-9		
56				15	5-7-8		
58				16	12-23-41		
60				17	7-14-14		
62	Light brown, saturated, very dense to medium dense, fine to coarse SAND, with little fine gravel, trace silt		SP	18	9-15-23		
64				19	7-11-21		
66				20	8-11-19		
68							
70							
72							
74	Light brown, saturated, dense, fine to coarse SAND, with trace to little fine gravel, trace silt and clay lenses at 90 feet		SP-SM	20	9-11-20		
76							
78	Boring terminated at 90.5 feet.						
80							
82							
84							
86							
88							
90							
92							
94							
96							
98							
100							



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LOG OF BORING B-9

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M.L. Joseph Sand & Gravel
25136 Dupont Highway
Georgetown, Delaware 19947

Route 404 Borrow Pit

Project No.: JDH-10/18/236

Date Completed: : May 21, 2018
 Logged By: : J. Lindsey
 Drilled By: : B. Hynes
 Drilling Method: : HSA (Geoprobe 3230)
 Total Depth: : 65.5 feet

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	Remarks
0	Brown, wet, very loose, fine to medium SAND, with some silt, trace clay		SM	1	1-1-2	Scale 1" ~ 6.2 feet
2	Brown, wet, loose, fine to medium SAND, with little silt, trace clay		SP-SM	2	3-3-4	Approximately 12 inches of organic bearing soil was encountered at the ground surface.
4	Brown, wet, loose, fine to medium SAND, with some silt, trace clay		SM	3	4-4-5	Groundwater was encountered at 8.5 feet during drilling operations.
6	Brown, saturated, loose, fine to medium SAND, with little silt, little fine gravel, trace clay		SP-SM	4	2-3-5	At completion, water was at 6 feet; boring caved in at 12 feet.
8				5	1-2-3	
10				6	3-5-5	
12				7	6-6-7	
14				8	1-3-4	
16				9	3-5-8	
18	Brown, saturated, loose, fine to medium SAND, with trace silt		SP	10	3-3-3	
20				11	5-7-4	
22				12	9-11-11	
24						
26						
28	Light gray, saturated, loose to medium dense, fine to coarse SAND, with trace silt		SP			
30						
32						
34						
36						
38						
40						
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44						
46						
48						
50						



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LOG OF BORING B-9

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M.L. Joseph Sand & Gravel
25136 Dupont Highway
Georgetown, Delaware 19947

Route 404 Borrow Pit
Project No.: JDH-10/18/236

Date Completed: : May 21, 2018
Logged By: : J. Lindsey
Drilled By: : B. Hynes
Drilling Method: : HSA (Geoprobe 3230)
Total Depth: : 65.5 feet

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	Remarks
50	Light gray, saturated, loose to medium dense, fine to coarse SAND, with trace silt		SP	12	9-11-11	
52						
54				13	9-9-9	
56						
58						
60			14	11-12-13		
62						
64				15	7-7-13	
66	Boring terminated at 65.5 feet.					
68						
70						
72						
74						
76						
78						
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**HYNES
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LOG OF BORING B-10

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M.L. Joseph Sand & Gravel
25136 Dupont Highway
Georgetown, Delaware 19947

Route 404 Borrow Pit
Project No.: JDH-10/18/236

Date Completed: : May 21, 2018
Logged By: : J. Lindsey
Drilled By: : B. Hynes
Drilling Method: : HSA (Geoprobe 3230)
Total Depth: : 65.5 feet

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	Remarks
0	Brown, wet, very soft, silty CLAY, with little fine sand		CL	1	1-1-1-2	Scale 1" ~ 6.2 feet
2	Brown, wet to saturated, loose, fine to medium SAND, with some silt, trace clay		SM	2	3-3-4	Approximately 12 inches of organic bearing soil was encountered at the ground surface. Groundwater was encountered at 8 feet during drilling operations. At completion, water was at 5 feet; boring caved in at 6 feet.
4				3	4-4-5	
6				4	2-3-5	
12	Brown, saturated, very loose, fine to coarse SAND, with trace silt, trace fine gravel		SP	5	1-2-3	
14				6	3-5-5	
18	Brown, saturated, loose to medium dense, fine to medium SAND, with trace silt		SP	7	6-6-7	
20				8	1-3-4	
22				9	3-5-8	
24				10	3-3-3	
28	Brown, saturated, loose to medium dense, fine to coarse SAND, with trace silt		SP	11	5-7-4	
30				12	9-11-11	
32	Brown, saturated, medium dense, fine to coarse SAND, with little fine to medium gravel, trace silt		SP			
34						
36	Brown, saturated, medium dense, fine to coarse SAND, with trace silt		SP			
38						
40						
42						
44						
46						
48						
50						



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LOG OF BORING B-10

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M.L. Joseph Sand & Gravel
25136 Dupont Highway
Georgetown, Delaware 19947

Route 404 Borrow Pit
Project No.: JDH-10/18/236

Date Completed: : May 21, 2018
 Logged By: : J. Lindsey
 Drilled By: : B. Hynes
 Drilling Method: : HSA (Geoprobe 3230)
 Total Depth: : 65.5 feet

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	Remarks
50	Brown, saturated, medium dense, fine to coarse SAND, with trace silt		SP	12	9-11-11	
52				13	9-9-9	
54				14	11-12-13	
56				15	7-7-13	
58						
60	Boring terminated at 65.5 feet.					
62						
64						
66						
68						
70						
72						
74						
76						
78						
80						
82						
84						
86						
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**HYNES
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LOG OF BORING B-11

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M.L. Joseph Sand & Gravel
25136 Dupont Highway
Georgetown, Delaware 19947

Route 404 Borrow Pit
Project No.: JDH-10/18/236

Date Completed: : May 29, 2018
 Logged By: : J. Lindsey
 Drilled By: : B. Hynes
 Drilling Method: : HSA (Geoprobe 7822 DT)
 Total Depth: : 65.5 feet

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	Remarks
0	Brown, saturated, very loose, fine to medium SAND, with little silt		SP-SM	1	2-2-3-3	Scale 1" ~ 6.2 feet
2	Light brown, wet, loose, fine to medium SAND, with little silt, trace clay		SP-SM	2	2-3-3	Approximately 12 inches of organic bearing soil was encountered at the ground surface.
4	Brown, wet, medium dense, fine to coarse SAND, with some silt, trace clay		SM	3	3-5-7	Groundwater was encountered at 12 feet during drilling operations.
6	Brown, wet, soft, silty CLAY, with trace fine sand		CL	4	2-1-3	
8	Brown, saturated, very loose to medium dense, fine to medium SAND, with trace silt			5	1-2-2	
10			SP	6	2-3-4	
12				7	3-5-8	
14				8	2-5-6	
16			SP	9	6-7-8	
18				10	5-7-8	
20				11	6-5-8	
22			SP	12	8-15-16	
24						
26						
28						
30						
32						
34						
36						
38						
40						
42						
44						
46						
48						
50						



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LOG OF BORING B-11

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M.L. Joseph Sand & Gravel
25136 Dupont Highway
Georgetown, Delaware 19947

Route 404 Borrow Pit
Project No.: JDH-10/18/236

Date Completed: : May 29, 2018
Logged By: : J. Lindsey
Drilled By: : B. Hynes
Drilling Method: : HSA (Geoprobe 7822 DT)
Total Depth: : 65.5 feet

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	Remarks
50	Brown, saturated, medium dense to very dense, fine to coarse SAND, with trace silt, trace fine gravel		SP	12	8-15-16	
52						
54				13	21-50/5"	
56						
58						
60				14	12-16-20	
62						
64				15	11-17-21	
66	Boring terminated at 65.5 feet.					
68						
70						
72						
74						
76						
78						
80						
82						
84						
86						
88						
90						
92						
94						
96						
98						
100						



**HYNES
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LOG OF BORING B-12

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M.L. Joseph Sand & Gravel
25136 Dupont Highway
Georgetown, Delaware 19947

Route 404 Borrow Pit

Project No.: JDH-10/18/236

Date Completed: : May 22, 2018
 Logged By: : J. Lindsey
 Drilled By: : M. Hynes
 Drilling Method: : HSA (Geoprobe 3230)
 Total Depth: : 65.5 feet

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	Remarks
0	Gray, wet, very loose to loose, fine to medium SAND, with some silt, trace clay (mottles)		SM	1	1-1-1-2	Scale 1" ~ 6.2 feet
2				2	3-3-4	
6	Light gray, saturated, loose to very loose, fine SAND, with some silt, trace clay		SM	3	4-4-5	Groundwater was encountered at 5.5 feet during drilling operations. At completion, water was at 4 feet; boring caved in at 6.5 feet.
8				4	2-3-5	
12	Brown, saturated, very loose, fine to coarse SAND, with trace silt, trace fine gravel		SP	5	1-2-3	
14				6	3-5-5	
18	Light brown, saturated, loose to medium dense, fine to medium SAND, with trace silt		SP	7	6-6-7	
20				8	1-3-4	
32	Brown, saturated, loose to medium dense, fine to coarse SAND, with trace silt, trace fine gravel		SP	9	3-5-8	
34				10	3-3-3	
36				11	5-7-4	
38						
40				12	9-11-11	



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LOG OF BORING B-12


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M.L. Joseph Sand & Gravel
25136 Dupont Highway
Georgetown, Delaware 19947

Route 404 Borrow Pit

Project No.: JDH-10/18/236

Date Completed: : May 22, 2018
 Logged By: : J. Lindsey
 Drilled By: : M. Hynes
 Drilling Method: : HSA (Geoprobe 3230)
 Total Depth: : 65.5 feet

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	Remarks
50 52 54 56 58 60 62 64	Brown, saturated, loose to medium dense, fine to coarse SAND, with trace silt, trace fine gravel		SP	12 13 14 15	9-11-11 9-9-9 11-12-13 7-7-13	
66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100	Boring terminated at 65.5 feet.					



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LOG OF BORING B-13

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M.L. Joseph Sand & Gravel
25136 Dupont Highway
Georgetown, Delaware 19947

Route 404 Borrow Pit

Project No.: JDH-10/18/236

Date Completed: : May 21, 2018
 Logged By: : J. Lindsey
 Drilled By: : M. Hynes
 Drilling Method: : HSA (Geoprobe 3230)
 Total Depth: : 65.5 feet

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	Remarks
0	Brown, wet, loose, fine to medium SAND, with trace silt		SP	1	1-3-3-3	Scale 1" ~ 6.2 feet
2	Brown, wet, medium stiff, clayey SILT, with little fine to medium sand		ML	2	2-3-4	Approximately 12 inches of organic bearing soil was encountered at the ground surface.
4	Brown, wet, loose, fine to medium SAND, with some silt, trace clay		SM	3	3-4-4	Groundwater was encountered at 11 feet during drilling operations.
6	Light gray, wet to saturated, loose, fine to medium SAND, with some silt		SP-SM	4	2-4-6	At completion, water was at 4 feet; boring caved in at 5.5 feet.
8	Brown, saturated, very loose, fine SAND, with little silt		SP-SM	5	1-1-1	
10	Brown, saturated, medium dense to loose SAND, with trace silt, trace fine gravel			6	5-8-9	
12				7	3-4-4	
14				8	6-7-8	
16				9	3-5-7	
18				10	4-6-7	
20				11	3-6-7	
22				12	5-6-8	
24						
26						
28						
30						
32						
34						
36						
38						
40						
42	Brown, wet, medium dense, fine to coarse SAND, with trace silt		SP			
44						
46						
48						
50						



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LOG OF BORING B-13

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M.L. Joseph Sand & Gravel
25136 Dupont Highway
Georgetown, Delaware 19947

Route 404 Borrow Pit

Project No.: JDH-10/18/236

Date Completed: : May 21, 2018
 Logged By: : J. Lindsey
 Drilled By: : M. Hynes
 Drilling Method: : HSA (Geoprobe 3230)
 Total Depth: : 65.5 feet

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	Remarks
50	Brown, wet, medium dense, fine to coarse SAND, with trace silt		SP	12	5-6-8	
52						
54				13	4-7-7	
56						
58						
60				14	5-8-11	
62						
64				15	7-9-13	
66	Boring terminated at 65.5 feet.					
68						
70						
72						
74						
76						
78						
80						
82						
84						
86						
88						
90						
92						
94						
96						
98						
100						



**HYNES
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LOG OF BORING B-14

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M.L. Joseph Sand & Gravel
25136 Dupont Highway
Georgetown, Delaware 19947

Route 404 Borrow Pit
Project No.: JDH-10/18/236

Date Completed: May 22, 2018
 Logged By: J. Lindsey
 Drilled By: M. Hynes
 Drilling Method: HSA (Geoprobe 3230)
 Total Depth: 65.5 feet

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	Remarks
0	Brown, wet, very loose, fine to medium SAND, with some silt, trace clay		SM	1	1-3-3-3	Scale 1" ~ 6.2 feet
2	Brown, wet, medium dense, fine to medium SAND, with little silt, trace clay		SP-SM	2	2-3-4	Approximately 12 inches of organic bearing soil was encountered at the ground surface.
4				3	3-4-4	Groundwater was encountered at 15 feet during drilling operations.
6				4	2-4-6	At completion, water was at 5 feet; boring caved in at 7 feet.
8	Light brown, wet, medium dense, fine to medium SAND, with little silt, trace fine gravel		SP-SM	5	1-1-1	
10	Light gray, wet to saturated, very loose, fine to medium SAND, with little silt (mottles)		SP-SM	6	5-8-9	
12				7	3-4-4	
14				8	6-7-8	
16				9	3-5-7	
18	Brown, saturated, loose to medium dense, fine to medium SAND, with trace silt		SP	10	4-6-7	
20				11	3-6-7	
22				12	5-6-8	
24						
26						
28						
30						
32						
34						
36						
38	Brown, saturated, medium dense, fine to medium SAND, with trace silt, trace fine gravel		SP			
40						
42						
44						
46						
48						
50						



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M.L. Joseph Sand & Gravel
25136 Dupont Highway
Georgetown, Delaware 19947

Route 404 Borrow Pit

Project No.: JDH-10/18/236

Date Completed: : May 22, 2018
 Logged By: : J. Lindsey
 Drilled By: : M. Hynes
 Drilling Method: : HSA (Geoprobe 3230)
 Total Depth: : 65.5 feet

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	Remarks
50	Brown, saturated, medium dense, fine to medium SAND, with trace silt, trace fine gravel		SP	12	5-6-8	
52						
54				13	4-7-7	
56						
58						
60				14	5-8-11	
62						
64				15	7-9-13	
66	Boring terminated at 65.5 feet.					
68						
70						
72						
74						
76						
78						
80						
82						
84						
86						
88						
90						
92						
94						
96						
98						
100						



**HYNES
&
ASSOCIATES**

LOG OF BORING B-15

(Page 1 of 2)

M.L. Joseph Sand & Gravel
25136 Dupont Highway
Georgetown, Delaware 19947
Route 404 Borrow Pit
Project No.: JDH-10/18/236

Date Completed: : May 22, 2018
Logged By: : J. Lindsey
Drilled By: : M. Hynes
Drilling Method: : HSA (Geoprobe 3230)
Total Depth: : 65.5 feet

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	Remarks
0	Brown, wet, very soft, silty CLAY, with little fine to medium sand		CL	1	1-1-1	Scale 1" ~ 6.2 feet
2	Brown, wet, loose, fine to coarse SAND, with little silt, trace clay		SP-SM	2	2-4-4	Approximately 12 inches of organic bearing soil was encountered at the ground surface.
4	Brown, wet, very loose, fine to medium SAND and SILT, little clay		ML/SM	3	1-2-2	Groundwater was encountered at 12 feet during drilling operations.
6	Brown, wet, very loose, fine to medium SAND, with some silt		SM	4	1-1-3	At completion, water was at 5 feet; boring caved in at 6 feet.
8	Brown, saturated, loose, fine to medium SAND, with trace silt, trace fine to medium gravel		SP	5	2-4-5	
10	Brown, saturated, loose to medium dense, fine to medium SAND, with trace silt		SP	6	4-5-5	
12			SP	7	2-4-5	
14			SP	8	5-7-8	
16			SP	9	3-6-7	
18			SP	10	5-7-9	
20			SP	11	8-8-9	
22			SP	12	8-14-16	



**HYNES
&
ASSOCIATES**

LOG OF BORING B-15

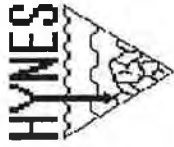
(Page 2 of 2)

M.L. Joseph Sand & Gravel
25136 Dupont Highway
Georgetown, Delaware 19947

Route 404 Borrow Pit
Project No.: JDH-10/18/236

Date Completed: : May 22, 2018
 Logged By: : J. Lindsey
 Drilled By: : M. Hynes
 Drilling Method: : HSA (Geoprobe 3230)
 Total Depth: : 65.5 feet

Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample No.	Blows per 6 inches	Remarks
50	Brown, saturated, medium dense, fine to coarse SAND, with trace silt, trace fine gravel		SP	12	8-14-16	
52						
54				13	8-14-16	
56						
58						
60				14	7-11-11	
62						
64				15	6-9-11	
66	Boring terminated at 65.5 feet.					
68						
70						
72						
74						
76						
78						
80						
82						
84						
86						
88						
90						
92						
94						
96						
98						
100						



JOHN D. HYNES & ASSOCIATES, INC.

Geotechnical and Environmental Consultants

Monitoring Well Installation

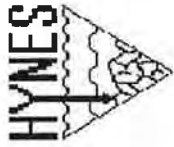
Construction Inspection and Materials Testing

Laboratory Test Results

Route 404 Borrow Pit

Project No.: JDH-10/18/236

Boring No./Sample No.	B-9/S-12	B-9	B-10/S-11	B-10	B-11/S-13	B-11	B-12/S-6
Begin Depth (ft.)	49.0	Composite	44.0	Composite	54.0	Composite	19.0
End Depth (ft.)	50.5		45.5		55.5		20.5
Sieve Size	Percent Passing						
3/4"			100				
1/2"	100	100	91.7	95.0		100	100
3/8"	99.4	99.6	89.0	95.0	100	99.6	99.0
No. 4	92.8	97.8	83.9	90.2	99.7	98.9	95.7
No. 8	81.2	90.2	75.7	82.7	97.8	97.1	90.3
No. 10	78.7	83.2	73.5	80.3	96.4	96.3	88.7
No. 16	63.2	66.2	62.5	63.7	78.8	89.3	79.0
No. 20	49.9	55.5	53.2	52.0	60.0	79.7	68.6
No. 30	31.3	39.8	37.9	38.1	35.7	61.0	50.5
No. 40	17.0	31.5	20.9	26.8	17.9	39.6	32.0
No. 50	10.8	27.5	14.9	18.1	10.6	25.7	19.8
No. 60	8.9	19.8	13.3	15.2	8.8	20.8	15.4
No. 100	6.1	11.2	10.2	10.9	6.1	13.1	10.0
No. 200	4.8	9.8	7.9	8.2	4.2	9.6	8.1
Natural Moisture %	14.9	15.2	14.7	-	19.0	21.5	20.3
MD SHA Specs	-	D, E	D, E	E	B, C	-	E
DelDOT Specs	A, B, C	A, B, C, D, G-V, G-VI, I-D, I-E	A, B, C, E, G-V	A, B, C, D, E, G-V, G-VI, I-D, I-E	A, B, C	A, B, C, D, E, G-V, G-VI	A, B, C, D, E, G-V, G-VI
ASTM	-	B	B	-	B	-	-



JOHN D. HYNES & ASSOCIATES, INC.

Geotechnical and Environmental Consultants

Monitoring Well Installation

Construction Inspection and Materials Testing

Laboratory Test Results

Route 404 Borrow Pit

Project No.: JDH-10/18/236

Boring No./Sample No.	B-12	B-13/S-13	B-13	B-14/S-10	B-14	B-15/S-15	B-15
Begin Depth (ft.)	Composite	54.0	Composite	39.0	Composite	59.0	Composite
End Depth (ft.)		55.5		40.5		60.5	
Sieve Size	Percent Passing						
3/4"		100		100		100	100
1/2"		98.6	100	84.4		89.9	98.8
3/8"	100	97.0	96.2	79.3	100	82.0	97.1
No. 4	98.9	92.3	93.2	73.4	99.8	72.4	95.4
No. 8	96.9	79.5	88.9	70.2	97.9	65.2	92.4
No. 10	95.6	75.4	87.2	69.6	96.1	63.8	91.6
No. 16	85.7	54.8	81.4	64.5	82.7	56.3	85.5
No. 20	73.0	42.7	71.4	57.4	70.9	50.3	76.6
No. 30	55.6	31.0	55.9	45.4	56.3	40.2	59.0
No. 40	42.0	21.8	39.6	32.0	40.2	28.6	38.9
No. 50	32.0	16.4	27.8	20.9	27.4	17.8	25.4
No. 60	25.3	13.6	19.1	18.3	23.3	14.3	20.1
No. 100	13.4	8.2	11.5	14.3	16.0	9.9	12.8
No. 200	10.0	6.2	8.7	11.6	12.5	7.5	9.0
Natural Moisture %	21.5	14.6	20.1	13.9	15.6	15.4	23.8
MD SHA Specs	-	D, E	E	D, E	-	D, E	-
DelDOT Specs	A, B, C, D, E, G-V, G-VI	A, B, C, E, G-V, I-D, I-E	A, B, C, D, E, G-V, G-VI	A, C, D, E, G-V, G-VI, I-E	A, C, D, E, G-V, G-VI	A, B, C, D, E, G-IV, G-V, I-D, I-E	A, B, C, D, E, G-V, G-VI
ASTM	-	-	-	-	-	B, C	A, B, C

Analytical Report for
John D. Hynes & Associates
Certificate of Analysis No.: 18062206

Project Manager: John Hynes
Project Name : Route 404 Borrow Pit
Project Location: Georgetown, DE
Project ID : 17/236



June 29, 2018
Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228
Phone: (410) 747-8770
Fax: (410) 788-8723

OFFICES:
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ROUTE 40 WEST
BALTIMORE, MD 21228
410-747-8770
800-932-9047
FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.



June 29, 2018

John Hynes
John D. Hynes & Associates
32185 Beaver Run Drive
Salisbury, MD 21801

Reference: PSS Work Order(s) No: **18062206**
Project Name: Route 404 Borrow Pit
Project Location: Georgetown, DE
Project ID.: 17/236

Dear John Hynes :

This report includes the analytical results from the analyses performed on the samples received under the project name referenced above and identified with the Phase Separation Science (PSS) Work Order(s) numbered **18062206**.

All work reported herein has been performed in accordance with current NELAP standards, referenced methodologies, PSS Standard Operating Procedures and the PSS Quality Assurance Manual unless otherwise noted in the Case Narrative Summary. PSS is limited in liability to the actual cost of the sample analysis done.

PSS reserves the right to return any unused samples, extracts or related solutions. Otherwise, the samples are scheduled for disposal, without any further notice, on July 27, 2018, with the exception of air canisters which are cleaned immediately following analysis. This includes any samples that were received with a request to be held but lacked a specific hold period. It is your responsibility to provide a written request defining a specific disposal date if additional storage is required. Upon receipt, the request will be acknowledged by PSS, thus extending the storage period.

This report shall not be reproduced except in full, without the written approval of an authorized PSS representative. A copy of this report will be retained by PSS for at least 5 years, after which time it will be disposed of without further notice, unless prior arrangements have been made.

We thank you for selecting Phase Separation Science, Inc. to serve your analytical needs. If you have any questions concerning this report, do not hesitate to contact us at 410-747-8770 or info@phaseonline.com.

Sincerely,

A handwritten signature in black ink, appearing to read 'Cathy Thompson', is written over a horizontal line.

Cathy Thompson
QA Officer



Sample Summary

Client Name: John D. Hynes & Associates

Project Name: Route 404 Borrow Pit

Work Order Number(s): 18062206

Project ID: 17/236

The following samples were received under chain of custody by Phase Separation Science (PSS) on 06/22/2018 at 10:30 am

Lab Sample Id	Sample Id	Matrix	Date/Time Collected
18062206-001	B-12/S10	SOIL	05/21/18 00:00
18062206-002	B-14/S12	SOIL	05/23/18 00:00
18062206-003	B-3/S6	SOIL	05/31/18 00:00

Please reference the Chain of Custody and Sample Receipt Checklist for specific container counts and preservatives. Any sample conditions not in compliance with sample acceptance criteria are described in Case Narrative Summary.

Notes:

1. The presence of a common laboratory contaminant such as methylene chloride may be considered a possible laboratory artifact. Where observed, appropriate consideration of data should be taken.
2. Unless otherwise noted in the case narrative, results are reported on a dry weight basis with the exception of pH, flashpoint, moisture, and paint filter test.
3. Drinking water samples collected for the purpose of compliance with SDWA may not be suitable for their intended use unless collected by a certified sampler [COMAR 26.08.05.07.C.2].
4. The analyses of 1,2-dibromo-3-chloropropane (DBCP) and 1,2-dibromoethane (EDB) by EPA 524.2 and calcium, magnesium, sodium and iron by EPA 200.8 are not currently promulgated for use in testing to meet the Safe Drinking Water Act and as such cannot be used for compliance purposes. The listings of the current promulgated methods for testing in compliance with the Safe Drinking Water Act can be found in the 40 CFR part 141.1, for the primary drinking water contaminants, and part 141.3, for the secondary drinking water contaminants.
5. Sample prepared under EPA 3550C with concentrations greater than 20 mg/Kg should employ the microtip extraction procedure if required to meet data quality objectives.
6. The analysis of acrolein by EPA 624 must be analyzed within three days of sampling unless pH is adjusted to 4-5 units [40 CFR part 136.3(e)].
7. Method 180.1, The Determination of Turbidity by Nephelometry, recommends samples over 40 NTU be diluted until the turbidity falls below 40 units. Routine samples over 40 NTU may not be diluted as long as the data quality objectives are not affected.
8. Alkalinity results analyzed by EPA 310.2 that are reported by dilution are estimated and are not in compliance with method requirements.

Standard Flags/Abbreviations:

- B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- C Results Pending Final Confirmation.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- Fail The result exceeds the regulatory level for Toxicity Characteristic (TCLP) as cited in 40 CFR 261.24 Table 1.
- J The target analyte was positively identified below the reporting limit but greater than the MDL.
- MDL This is the Laboratory Method Detection Limit which is equivalent to the Limit of Detection (LOD). The LOD is an estimate of the minimum amount of a substance that an analytical process can reliably detect. This value will remain constant across multiple similar instrumentation and among different analysts. An LOD is analyte and matrix specific.
- ND Not Detected at or above the reporting limit.
- RL PSS Reporting Limit.
- U Not detected.

Certifications:

NELAP Certifications: PA 68-03330, VA 460156
State Certifications: MD 179, WV 303
Regulated Soil Permit: P330-12-00268
NSWC USCG Accepted Laboratory
LDBE MWAA LD1997-0041-2015

OFFICES:
 6630 BALTIMORE NATIONAL PIKE
 ROUTE 40 WEST
 BALTIMORE, MD 21228
 410-747-8770
 800-932-9047
 FAX 410-788-8723

PHASE SEPARATION SCIENCE, INC.



CERTIFICATE OF ANALYSIS

No: 18062206

John D. Hynes & Associates, Salisbury, MD

June 29, 2018

Project Name: Route 404 Borrow Pit

Project Location: Georgetown, DE

Project ID: 17/236

Sample ID: B-12/S10 **Date/Time Sampled: 05/21/2018 00:00** **PSS Sample ID: 18062206-001**
Matrix: SOIL **Date/Time Received: 06/22/2018 10:30** **% Solids: 87**

Total Metals Analytical Method: SW-846 6020 A Preparation Method: 3050B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Iron	9,600	mg/kg	2,400		50	06/25/18	06/27/18 16:24	1051

Sample ID: B-14/S12 **Date/Time Sampled: 05/23/2018 00:00** **PSS Sample ID: 18062206-002**
Matrix: SOIL **Date/Time Received: 06/22/2018 10:30** **% Solids: 90**

Total Metals Analytical Method: SW-846 6020 A Preparation Method: 3050B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Iron	15,000	mg/kg	2,200		50	06/25/18	06/27/18 16:28	1051

Sample ID: B-3/S6 **Date/Time Sampled: 05/31/2018 00:00** **PSS Sample ID: 18062206-003**
Matrix: SOIL **Date/Time Received: 06/22/2018 10:30** **% Solids: 82**

Total Metals Analytical Method: SW-846 6020 A Preparation Method: 3050B

	Result	Units	RL	Flag	Dil	Prepared	Analyzed	Analyst
Iron	25,000	mg/kg	2,600		50	06/25/18	06/27/18 16:33	1051



Case Narrative Summary

Client Name: John D. Hynes & Associates

Project Name: Route 404 Borrow Pit

Work Order Number(s): 18062206

Project ID: 17/236

Any holding time exceedances, deviations from the method specifications, regulatory requirements or variations to the procedures outlined in the PSS Quality Assurance Manual are outlined below.

The analyses of chlorine, pH, dissolved oxygen, temperature and sulfite for drinking water and non-potable samples tested for compliance have a maximum holding time of 15 minutes. As such, all laboratory analyses for these analytes exceed holding times.

Matrix spike and matrix spike duplicate analyses may not be performed due to insufficient sample quantity. In these instances, a laboratory control sample and laboratory control sample duplicate are analyzed unless otherwise noted or specified in the method.

Unless otherwise noted, surrogate recoveries outside of the acceptance criteria are most often the result of sample matrix interference and/or sample dilution.

Quality control samples that display a high bias will not be narrated when sample target compounds are not detected.

Sample Receipt:

All sample receipt conditions were acceptable.

Analytical:

VCP Metals

Batch: 154695

Matrix spike and/or matrix spike duplicate (MS/MSD) exceedances identified; see MS summary form.

The concentration of the following analyte(s) in the reference sample was greater than four times the matrix spike concentration :iron

NELAP accreditation was held for all analyses performed unless noted below. See www.phaseonline.com for complete PSS scope of accreditation.



Analytical Data Package Information Summary

Work Order(s): 18062206

Report Prepared For: John D. Hynes & Associates, Salisbury, MD

Project Name: Route 404 Borrow Pit

Project Manager: John Hynes

Method	Client Sample Id	Analysis Type	Lab Sample Id	Analyst	Mtx	Prep Batch	Analytical Batch	Sampled	Prepared	Analyzed
SM2540G	B-12/S10	Initial	18062206-001	1061	S	154645	154645	05/21/2018	06/25/2018 14:25	06/25/2018 14:25
	B-14/S12	Initial	18062206-002	1061	S	154645	154645	05/23/2018	06/25/2018 14:25	06/25/2018 14:25
	B-3/S6	Initial	18062206-003	1061	S	154645	154645	05/31/2018	06/25/2018 14:25	06/25/2018 14:25
SW-846 6020 A	72063-1-BKS	BKS	72063-1-BKS	1051	S	72063	154695	-----	06/25/2018 10:17	06/25/2018 21:03
	72063-1-BLK	BLK	72063-1-BLK	1051	S	72063	154695	-----	06/25/2018 10:17	06/25/2018 20:58
	B-12/S10 S	Reanalysis	18062206-001 S	1051	S	72063	154695	05/21/2018	06/25/2018 10:17	06/25/2018 21:13
	B-12/S10 SD	Reanalysis	18062206-001 SD	1051	S	72063	154695	05/21/2018	06/25/2018 10:17	06/25/2018 21:36
	B-12/S10	Reanalysis	18062206-001	1051	S	72063	154810	05/21/2018	06/25/2018 10:17	06/27/2018 16:24
	B-14/S12	Reanalysis	18062206-002	1051	S	72063	154810	05/23/2018	06/25/2018 10:17	06/27/2018 16:28
	B-3/S6	Reanalysis	18062206-003	1051	S	72063	154810	05/31/2018	06/25/2018 10:17	06/27/2018 16:33

PHASE SEPARATION SCIENCE, INC.

QC Summary 18062206

John D. Hynes & Associates
Route 404 Borrow Pit

Analytical Method: SW-846 6020 A

Seq Number: 154695

MB Sample Id: 72063-1-BLK

Matrix: Solid

LCS Sample Id: 72063-1-BKS

Prep Method: SW3050B

Date Prep: 06/25/18

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	Limits	Units	Analysis Date	Flag
Iron	<36.53	146.1	155.6	107	80-120	mg/kg	06/25/18 21:03	

Analytical Method: SW-846 6020 A

Seq Number: 154695

Parent Sample Id: 18062206-001

Matrix: Soil

MS Sample Id: 18062206-001 S

Prep Method: SW3050B

Date Prep: 06/25/18

MSD Sample Id: 18062206-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Iron	8014	179.1	11140	1745	6280	0	75-125	56	30	mg/kg	06/25/18 21:13	XF

Analytical Method: SW-846 6020 A

Seq Number: 154741

REBLK Sample Id: 72063-1-BLK

Matrix: Solid

LCS Sample Id: 72063-1-BKS

Prep Method: SW3050B

Date Prep: 06/25/18

Parameter	REBLK Result	Spike Amount	LCS Result	LCS %Rec	Limits	Units	Analysis Date	Flag
Iron	<36.53	146.1	154.9	106	75-125	mg/kg	06/26/18 13:44	

F = RPD exceeded the laboratory control limits
 X = Recovery of MS, MSD or both outside of QC Criteria
 H = Recovery of BS,BSD or both exceeded the laboratory control limits
 L = Recovery of BS,BSD or both below the laboratory control limits



SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

www.phaseonline.com

PHASE SEPARATION SCIENCE, INC.

email: info@phaseonline.com

1 *CLIENT: John D. Hynes & Associates
 *OFFICE LOC: 32185 Beaver Run Dr. Salisbury, MD 21842
 *PHONE NO.: 410 546-6462
 EMAIL: jdhynes@aol.com FAX NO.: 410 548-5346
 *PROJECT MGR: J. Redding
 *PROJECT NAME: Route 404 Borrow Pit PROJECT NO.: 17/236
 SITE LOCATION: Georgetown, DE P.O. NO.: 12517

2 PSS Work Order #: 1802206 18062206 PAGE OF
 Matrix Codes: SW-Surface Wtr GW-Ground Wtr WW-Waste Wtr O-Oil S-Soil L-Liquid SOL-Solid A-Air WI-Wipe
 No. C O N T A I N E R S

LAB NO.	*SAMPLE IDENTIFICATION	*DATE (SAMPLED)	*TIME (SAMPLED)	MATRIX (See Codes)	SAMPLE TYPE	Analysis Method Required	Remarks
1	B-12/510	5/21		S	G	3	Total Iron
2	B-14/512	5/23		S	G		
3	B-3/56	5/31		S	G		

3 *Requested TAT (One TAT per COC)
 5-Day 3-Day 2-Day Other
 Next Day Emergency Other
 Data Deliverables Required: COA QC SUMM CLP LIKE OTHER
 Special Instructions: UPS

4 Relinquished By: (1) J. Redding Date: 6/21 4:00 AM Received By: UPS
 Relinquished By: (2) UPS Date: 6/22/14 10:30 Received By: The WMA
 Relinquished By: (3) 12214 38X 01 9479 6268 Date: Received By:
 Relinquished By: (4) Date: Received By:

* # of Coolers: 0
 Custody Seal: ABS
 Ice Present: ABS Temp: 24°-25°C
 Shipping Carrier: UPS-ND

STATE RESULTS REPORTED TO:
 MD DE PA VA WV OTHER

DW COMPLIANCE? YES EDD FORMAT TYPE _____

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723

The client (Client Name), by signing, or having client's agent sign, this "Sample Chain of Custody/Agreement Form", agrees to pay for the above requested services per the latest version of the Service Brochure or PSS-provided quotation including any and all attorney's or other reasonable fees if collection becomes necessary. * = REQUIRED



Phase Separation Science, Inc

Sample Receipt Checklist

Work Order # 18062206 **Received By** Thomas Wingate
Client Name John D. Hynes & Associates **Date Received** 06/22/2018 10:30:00 AM
Project Name Route 404 Borrow Pit **Delivered By** UPS Priority Morning
Project Number 17/236 **Tracking No** 1Z21438X0194796268
Disposal Date 07/27/2018 **Logged In By** Thomas Wingate

Shipping Container(s)

No. of Coolers 1

Custody Seal(s) Intact?

N/A

Ice

Absent

Seal(s) Signed / Dated?

N/A

Temp (deg C)

25

Temp Blank Present

No

Documentation

COC agrees with sample labels?

Yes

Sampler Name

Not Provided

Chain of Custody

Yes

N/A

Sample Container

Appropriate for Specified Analysis?

Yes

Custody Seal(s) Intact?

Not Applicable

Intact?

Yes

Seal(s) Signed / Dated

Not Applicable

Labeled and Labels Legible?

Yes

Total No. of Samples Received 3

Total No. of Containers Received 3

Preservation

Total Metals

(pH<2)

N/A

Dissolved Metals, filtered within 15 minutes of collection

(pH<2)

N/A

Orthophosphorus, filtered within 15 minutes of collection

N/A

Cyanides

(pH>12)

N/A

Sulfide

(pH>9)

N/A

TOC, DOC (field filtered), COD, Phenols

(pH<2)

N/A

TOX, TKN, NH3, Total Phos

(pH<2)

N/A

VOC, BTEX (VOA Vials Rcvd Preserved)

(pH<2)

N/A

Do VOA vials have zero headspace?

N/A

624 VOC (Rcvd at least one unpreserved VOA vial)

N/A

524 VOC (Rcvd with trip blanks)

(pH<2)

N/A

Comments: (Any "No" response must be detailed in the comments section below.)

For any improper preservation conditions, list sample ID, preservative added (reagent ID number) below as well as documentation of any client notification as well as client instructions. Samples for pH, chlorine and dissolved oxygen should be analyzed as soon as possible, preferably in the field at the time of sampling. Samples which require thermal preservation shall be considered acceptable when received at a temperature above freezing to 6°C. Samples that are hand delivered on the day that they are collected may not meet these criteria but shall be considered acceptable if there is evidence that the chilling process has begun such as arrival on ice.

Samples Inspected/Checklist Completed By:

Date: 06/22/2018

Thomas Wingate

PM Review and Approval:

Date: 06/25/2018

Lynn Jackson



SAMPLE CHAIN OF CUSTODY/AGREEMENT FORM

www.phaseonline.com
email: info@phaseonline.com

PHASE SEPARATION SCIENCE, INC.

1 *CLIENT: John D. Hynes & Associates, 32185 Beaverfield Dr., Salisbury, MD 21842
 *PROJECT MGR: S. Redding *PHONE NO.: 410 546-5462
 EMAIL: jdhynes@aol.com FAX NO.: (410) 548-5346
 *PROJECT NAME: Route 404 Borrow Pit PROJECT NO.: 171236
 SITE LOCATION: Georgetown, DE P.O. NO.: 12517

PSS Work Order #: 18062205 18062206 PAGE ____ OF ____

Matrix Codes: SW=Surface Wtr DW=Drinking Wtr GW=Ground Wtr WW=Waste Wtr O=Oil S=Soil L=Liquid SOL=Solid A=Air W=Wipe

LAB NO.	*SAMPLE IDENTIFICATION	*DATE (SAMPLED)	*TIME (SAMPLED)	MATRIX (See Codes)	SAMPLER(S)	D.W. CERT NO.:	Preservatives Used		Analysis/Method Required	REMARKS
							No.	C O N T A I N E R S		
1	B-12/510	5/21		S	G				3	Total Iron
2	B-14/512	5/23		S	G					
3	B-3/56	5/31		S	G					

2 DW CERT NO.:

3 *Requested TAT (One TAT per COC)
 5-Day 3-Day 2-Day
 Next Day Emergency Other

4 # of Coolers: 0
 Custody Seal: ABS
 Ice Present: ABS Temp: 24°-25°C
 Shipping Carrier: UPS-ND

Data Deliverables Required:
 COA QC SUMM CLP LIKE OTHER

Special Instructions:

DW COMPLIANCE? YES NO

EDD FORMAT TYPE: _____

STATE RESULTS REPORTED TO:
 MD DE PA VA WV OTHER

5 Relinquished By: (1) J. Redding Received By: JPS
 Relinquished By: (2) JPS Received By: J. Redding
 Relinquished By: (3) 12314 38X 019479 6268 Received By: JPS
 Relinquished By: (4) Received By: JPS

6630 Baltimore National Pike • Route 40 West • Baltimore, Maryland 21228 • (410) 747-8770 • (800) 932-9047 • Fax (410) 788-8723
 The client (Client Name), by signing, or having client's agent sign, this "Sample Chain of Custody/Agreement Form", agrees to pay for the above requested services per the latest version of



FROEHLING & ROBERTSON, INC.

Engineering Stability Since 1881

9596 Deereco Road
Lutherville Timonium, MD 21093
T 410-825-4131 | F 321-7384

F&R Project Number: 75W0029

July 10, 2018

Attention: J. D. Hynes & Associates

Reference: Rt. 404 Borrow Pit
Corrosion Series Testing
Lab No: 20180083

Dear Mr. Justin Redding,

The table below displays the results for the soil sample delivered to us for corrosion series testing.

	pH	Resistivity (ohm-cm)	ReDox (mV)	Chlorides (mg/kg)	Sulfides (mg/kg)	Sulfates (mg/kg)
Sample	4.4	11,500	660.0	ND	ND	540

ND = Not Detected at the Reporting Limit

Chloride Reporting Limit (RL): 40 mg/kg

Sulfide Reporting Limit (RL): 2.2 mg/kg

Should you have any questions concerning this letter report, please contact the undersigned at your earliest convenience. We appreciate the opportunity to serve you.

Sincerely,
FROEHLING & ROBERTSON, INC.

Brendan L. Quirk, P.E.
Branch Manager

Maryland DOT Specifications

- A. Fine Aggregate - *Sand Mortar & Epoxies*
- B. Fine Aggregate - *Portland Cement Concrete & Underdrain*
- C. Fine Aggregate - *Lightweight Portland Cement Concrete*
- D. Bank Run Gravel - *Base*
- E. Bank Run Gravel - *Subbase*
- F. Coarse Aggregate - *Portland Cement Concrete, 57 & Underdrain*
- G. Coarse Aggregate - *Portland Cement Concrete, 67*
- H. Select Borrow (*See Report for Spec.*)
- I. Capping Borrow (*See Report for Spec.*)
- J. Modified Borrow (*See Report for Spec.*)
- K. Common Borrow (*See Report for Spec.*)

ASTM Specifications

- A. ASTM C-144: Standard Specification for Masonry Mortar (Natural Sand)
- B. ASTM C-404 Standard Specification for Aggregates for Masonry Grout (Fine Aggregates Size No. 1)
- C. ASTM C-404 Standard Specification for Aggregates for Masonry Grout (Fine Aggregates Size No. 2 Natural Sand)
- D. ASTM C-33 Standard Specification for Concrete Aggregates (Fine Aggregates)

Delaware DOT Specifications

- A. Borrow Type A
- B. Borrow Type B (Special Fill)
- C. Borrow Type C (Backfill)
- D. Borrow Type D (Cement Stabilization)
- E. Borrow Type E (Asphalt Stabilization)
- F. Del. No. 10 (SP-10)
- G. Borrow Type G (Select Borrow) - *Grades I, II, III, IV, V, VI*
- H. Fine Aggregate *Portland Cement Concrete*
- I. Asphalt Mixture *Types A, B, C, D & E*

**Table 1
Material Specifications**

Maryland Department of Transportation Specifications						
A.	B.	C.	D.	E.	F.	G.
Fine Aggregate	Fine Aggregate	Fine Aggregate	Bank Run Gravel	Bank Run Gravel	Coarse Aggregate Portland Cement Concrete	Coarse Aggregate Portland Cement Concrete
Sand, Mortar & Epoxies	Portland Cement Concrete & Underdrain	Lightweight Portland Cement Concrete	Base	Sub-base	57 and Underdrain	67
Sieve Size						
2 1/2"			100	100		
2"						
1 1/2"					100	
1"			85-100	90-100	95-100	100
3/4"						90-100
1/2"			60-100	60-100	25-60	
3/8"		100	100			20-55
No. 4	100	95-100	85-100		0-10	0-10
No. 8	95-100				0-5	0-5
No. 10			35-75	35-90		
No. 16		45-85	40-80			
No. 20						
No. 30						
No. 40			20-50	20-55		
No. 50		10-30	10-35			
No. 60						
No. 100	0-25	0-10	5-25			
No. 200	0-10			3-20	5-25	

Prepared by: John D. Hynes & Associates, Inc.



Table 2
Material Specifications

Delaware Department of Transportation Specifications																		
A.	B.	C.	D.	E.	F.	G.	G.	G.	G.	G.	G.	H.	I.	I.	I.	I.		
Borrow Type A	Borrow Type B	Borrow Type C	Borrow Type D	Borrow Type E	Del No. 10 (SP-10)	Borrow Type G7	Borrow Type G	Borrow Type G	Borrow Type G	Borrow Type G	Borrow Type G	Fine Aggregate	Asphalt Mixture	Asphalt Mixture	Asphalt Mixture	Asphalt Mixture		
	Special Fill	Backfill	Cement Stabilization	Asphalt Stabilization		Type I	Type II	Type III	Type IV	Type V	Type VI	Portland Cement Concrete	Type A	Type B	Type C	Type D	Type E	
Sieve Size																		
2 1/2"	100		100	100		100	100	95-100	95-100	95-100	95-100		100					
2"													90-100					
1 1/2"													60-90	100				
1"		85-100					75-95	85-100	85-100	85-100	85-100		40-75	95-100				
3/4"														75-95				
1/2"					100								30-65	50-80	100			
3/8"					85-100	30-65	40-75	50-85	60-100			100		45-70	85-100	100		100
No. 4					10-30	25-55	30-60	35-65	50-85	55-100	70-100	95-100	20-45	30-50	50-75	80-100	80-100	
No. 8					0-10	15-40	20-45	25-50	40-75	40-100	55-100			22-38	33-59	70-90	70-90	
No. 10																		
No. 16					0-5													
No. 20																		
No. 30																		
No. 40						8-20	15-30	15-30	25-45	20-50	30-70			9-23	14-32	30-55	30-55	
No. 50												5-30		6-18	7-26	15-40	15-40	
No. 60												1-10						
No. 100																		
No. 200	0-35	0-10	0-25	8-30	6-20	2-8	5-20	5-15	5-20	6-20	8-25	0-4	2-10	3-10	3-10	5-15	5-15	

Prepared by: John D. Hynes & Associates, Inc

**Table 3
Material Specifications**

	ASTM Specifications				Golf Course Sand Specifications
	A.	B.	C.	D.	
	ASTM C-144	ASTM C-404	ASTM C-404	ASTM C-33	
	Masonry Mortar	Masonry Grout	Masonry Grout	Concrete Aggregates	
	Natural Sand	Fine Aggregates Size #1	Fine Aggregates Size #2 (Natural Sand)	Fine Aggregates	
Sieve Size					
2 1/2"					
2"					
1 1/2"					
1"					
3/4"					
1/2"					
3/8"		100		100	
No. 4	100	95-100	100	95-100	
No. 8	95-100	80-100	95-100	80-100	
No. 10					
No. 16	70-100	50-85	70-100	50-85	
No. 20					100
No. 30	40-75	25-60	40-75	25-60	0-100
No. 40					0-100
No. 50	10-35	10-30	10-35	10-30	0-100
No. 60					0-10
No. 100	2-15	2-10	2-15	2-10	0-10
No. 200					0-5

Table 4
Materials Specifications

The following are the descriptions of the materials as presented in the Maryland Department of Transportation Standard Specifications for Construction and Materials dated 2001, on page 683 and 684, Section 916:

SECTION 916- SOIL AND SOIL-AGGREGATE BORROW

916.01 BORROW EXCAVATION. All borrow excavation shall be a soil or soil aggregate mixture and shall conform to the following:

Maximum dry density and optimum moisture content of the material shall be determined as specified in T 180, Method C unless the material has more than 35 percent retained on the No.4 sieve, in which case Method D shall be used. Material with a maximum dry density of less than 100 lb/ft³ is unsatisfactory and shall not be used in embankments unless otherwise specified in the Contract Documents; potentially expansive materials, such as steel slag, shall not be used.

Recycled Portland cement concrete or recycled HMA pavement may be used as select borrow, capping borrow, and modified borrow with the written approval of the Engineer. Recycled Portland cement concrete, recycled RMA pavement, and processed contaminated soil shall not be used within 1 ft of the surface in any area to be vegetated. All recycled or rehandled materials shall conform to Section TC-6.10.

916.01.01 Select Borrow. Select borrow shall conform to A-2, A-3, or A-2-4 material as specified in the Contract Documents. The maximum dry density shall be a minimum of 105 lb/ft³.

916.01.02 Capping Borrow. Capping borrow shall conform to the select borrow requirements except when A-3 material has less than 10 percent retained on the No. 10 sieve, at least 15 percent shall pass the No.200 sieve. Sieve analysis shall be determined in conformance with MSMT 302.

916.01.03 Modified Borrow. Modified borrow shall have a minimum of 50 percent retained on the No.4 sieve, a maximum liquid limit of 30 when tested as specified in T 89, and a maximum plasticity index of 9 when tested as specified in T 90. The maximum dry density shall not be less than 125 lb/ft³. A-5 material, as defined in the Contract Documents shall not be used.

916.01.04 Common Borrow. Common borrow shall have a maximum dry density of not less than 100 lb/ft³.



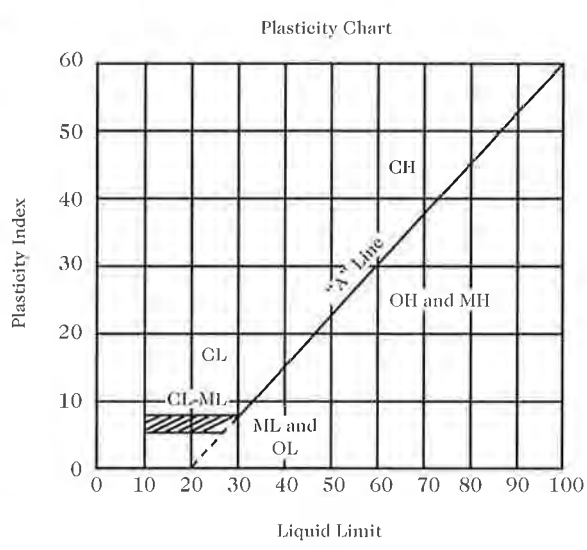
JOHN D. HYNES & ASSOCIATES, INC.

Geotechnical and Environmental Consultants
 Monitoring Well Installation
 Construction Inspection and Materials Testing

UNIFIED SOIL CLASSIFICATION SYSTEM

Major Divisions		Group Symbols	Typical Names	Laboratory Classification Criteria			
Coarse-grained soils (More than half of material is larger than No 200 sieve size)	Gravels (More than half of coarse fraction is larger than No 4 sieve size)	Clean gravels (Little or no fines)	GW	Well-graded gravels, gravel-sand mixtures, little or no fines	$C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 and 3		
			GP	Poorly graded gravels, gravel sand mixtures, little or no fines	Not meeting all gradation requirements for GW		
		Gravels with fines (Appreciable amount of fines)	GMA ^d	Silty gravels, gravel-sand-silt mixtures	Atterberg limits below "A" line or P.I. less than 4	Above "A" line with P.I. between 4 and 7 are <i>border-line</i> cases requiring use of dual symbols	
			GC	Clayey gravels, gravel-sand-clay mixtures	Atterberg limits above "A" line with P.I. greater than 7		
	Sands (More than half of coarse fraction is smaller than No 4 sieve size)	Clean sands (Little or no fines)	SW	Well-graded sands, gravelly sands,	$C_u = \frac{D_{60}}{D_{10}}$ greater than 6; $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 and 3		
			SP	Poorly graded sands, gravelly sands, little or no fines	Not meeting all gradation requirements for SW		
		Sands with fines (Appreciable amount of fines)	SM ^d	Silty sands, sand-silt mixtures	Atterberg limits below "A" line or P.I. less than 4	Above "A" line with P.I. between 4 and 7 are <i>border-line</i> cases requiring use of dual symbols.	
			SC	Clayey sands, sand-clay mixtures	Atterberg limits above "A" line with P.I. greater than 7		
		Fine-grained soils (More than half material is smaller than No 200 sieve)	Silts and clays (Liquid limit less than 50)	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands, or clayey silts with slight plasticity	<p style="text-align: center;">Plasticity Chart</p>	
				CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays		
OL	Organic silts and organic silty clays of low plasticity						
Silts and clays (Liquid limit greater than 50)	MH		Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts				
	CI		Inorganic clays of high plasticity, fat clays				
	OH		Organic clays of medium to high plasticity, organic silts				
Highly organic soils	Pt		Peat and other highly organic soils				

Determine percentages of sand and gravel from grain-size curve.
 Depending on percentage of fines (fraction smaller than No 200 sieve size), coarse
 grained soils are classified as follows:
 Less than 5 percent
 More than 12 percent
 5 to 12 percent
 GW, GP, SW, SP
 GM, GC, SM, SC
Borderline cases requiring dual symbols⁶





FIELD CLASSIFICATION SYSTEM FOR SOIL EXPLORATION

NON-COHESIVE SOILS (Silt, Sand, Gravel and Combinations)

DENSITY

Very Loose	- 5 blows/ft. or less
Loose	- 6 to 10 blows/ft.
Medium Dense	- 11 to 30 blows/ft.
Dense	- 31 to 50 blows/ft.
Very Dense	- 51 blows/ft. or more

PARTICLE SIZE IDENTIFICATION

Boulders	- 8 inch diameter or more
Cobbles	- 3 to 8 inch diameter
Gravel	- Coarse - 1 to 3 inch - Medium - 1/2 to 1 inch - Fine - 4.75 mm to 1/2 inch
Sand	- Coarse - 2.0 mm to 4.75 mm - Medium - 0.425 mm to 2.0 mm - Fine - 0.075 mm to 0.425 mm
Silt	- 0.075 mm to 0.002 mm

RELATIVE PROPORTIONS

Descriptive Term	Percent
Trace	1 - 10
Little	11 - 20
Some	21 - 35
And	36 - 50

COHESIVE SOILS (Clay, Silt and Combinations)

CONSISTENCY

Very Soft	- 3 blows/ft. or less
Soft	- 4 to 5 blows/ft.
Medium Stiff	- 6 to 10 blows/ft.
Stiff	- 11 to 15 blows/ft.
Very Stiff	- 16 to 30 blows/ft.
Hard	- 31 blows/ft. or more

PLASTICITY

Degree of Plasticity	Plasticity Index
None to Slight	0 - 4
Slight	5 - 7
Medium	8 - 22
High to Very High	over 22

Classification on logs are made by visual inspection of samples unless a sample has been subjected to laboratory classification testing.

Standard Penetration Test - Driving a 2.0" O.D., 1-3/8" I.D., splitspoon sampler a distance of 1.0 foot into undisturbed soil with a 140 pound hammer free falling a distance of 30.0 inches. It is customary to drive the spoon 6 inches to seat into undisturbed soil, then perform the test. The number of hammer blows for seating the spoon and making the test are recorded for each 6 inches of penetration on the drill log (Example - 6/8/9). The standard penetration test value (N - value) can be obtained by adding the last two figures (i.e. 8 + 9 = 17 blows/ft.). (ASTM D-1586)

Strata Changes - In the column "Soil Descriptions," on the drill log, the horizontal lines represent strata changes. A solid line (—) represents an actually observed change, a dashed line (----) represents an estimated change.

Groundwater - Observations were made at the times indicated. Porosity of soil strata, weather conditions, site topography, etc. may cause changes in the water levels indicated on the logs.



<http://www.rallylights.com/asa-bbs-brigade-smart-self-adjusting-white-sound-backup-alarm.html>

- 'Smart' self-adjusting sound level. Ambient noise is monitored once every second and automatically adjusts the alarm volume 5-10dB above the sampled noise level.
- Focuses warning sound in the danger zone behind the vehicle, so doesn't annoy site neighbors or other people.
- Sound is instantly locatable so you can tell which vehicle is reversing.
- Unlike annoying conventional alarms, the 'shh...shh...' sound of broadband sound (white sound) is easy on the ear and dissipates fast outside the danger area.
- Tough, durable, waterproof (IP68), conforms to SAE J994 environmental standards.
- Solid state, sparkfree electronics, epoxy sealed for protection against vibration, dust and moisture.
- Hole Centers:
 - SA-BBS-97 - 98-108mm
 - SA-BBS-107 - 153mm
- Size:
 - SA-BBS-97 - 127mm W, 65mm H, 76mm D
 - SA-BBS-107 - 173mm W, 79mm H, 95mm D
- Power Draw: 1.0 Amp
- Sound Source: Driver

Durability & standard

- Mechanical vibration: 10G

- Operating temperature: -40 to +185°F
 - CE marked
 - SAE J994
 - OSHA & MSHA compliant (providing appropriate unit correctly installed)
-

[VIDEO DEMONSTRATING SOUND ADJUSTMENT TO COMPENSATE FOR SURROUNDING NOISE LEVELS.]

<https://www.bing.com/videos/search?q=bbs-tek+smart+adjusting+reversing+alarm+-+white+noise+backup+indicator&mkt=en-us&httpsmsn=1&refig=0ea1fb76fec64a68bbad9ee20e9ac5e6&sp=-1&pq=bbs-tek+smart+adjusting+reversing+alarm+-+white+noise+backup+ind&sc=0-64&qsn=&sk=&cvid=0ea1fb76fec64a68bbad9ee20e9ac5e6&ru=%2fsearch%3fq%3dbbs-tek%2bsmart%2badjusting%2breversing%2balarm%2b-%2bwhite%2bnoise%2bbackup%2bindicator%26form%3dIENTHT%26mkt%3den-us%26httpsmsn%3d1%26refig%3d0ea1fb76fec64a68bbad9ee20e9ac5e6%26sp%3d-1%26pq%3dbbs-tek%2bsmart%2badjusting%2breversing%2balarm%2b-%2bwhite%2bnoise%2bbackup%2bind%26sc%3d0-64%26qs%3dn%26sk%3d%26cvid%3d0ea1fb76fec64a68bbad9ee20e9ac5e6&view=detail&mmscn=vwrc&mid=604FBBE2304AE4A7D2A2604FBBE2304AE4A7D2A2&FORM=WRVORC>

[VIDEO - DEMONSTRATING BETTER RESIDENTIAL USE; SOUND IS FOCUSED FOR AREA OF CONCERN]

<https://www.ionnic.com/safety/audiable/reversing-alarms/self-adjusting-white-sound.html>

SPECIFICATIONS:

- Output: 87-107 dB(A) @ 1m
 - Voltage: 12-24V
 - Body: Glass reinforced nylon
 - Cable Length: 1m
 - Vibration: 10G
 - EMC: CE & 'e' marked
 - Standards: SAE J994 environmental
 - Operating Temp: -40° C to + 85°C
 - IP Rating: IP68
-

<https://www.suburbanseats.com/p/back-up-alarm-92-decibel>

Features:

- 12-24 Volts
- IP68
- Size (WxHxD) 4.1 x 2.6" x 1.5"

[DfAhVmplkKHd9gBGgQFjAKegQIBRAC&url=http%3A%2F%2Fdigitalcommons.unl.edu%2Fcgi%2Fviewcontent.cgi%3Farticle%3D1213%26context%3Dusarmyresearch&usg=AOvVaw3AnKc1O8HwytdcgludUm9o](http://www.digitalcommons.unl.edu/cgi/viewcontent.cgi?article%3D1213%26context%3Dusarmyresearch&usg=AOvVaw3AnKc1O8HwytdcgludUm9o)

Environmental evaluation on effects of dredged material

https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=15&ved=2ahUKEwjOyrj87-DfAhVmplkKHd9gBGgQFjAOegQIARAC&url=https%3A%2F%2Fwww.epa.gov%2Fsites%2Fproduction%2Ffiles%2F2015-09%2Fdocuments%2F2004_08_20_oceans_regulatory_dumpdredged_framework_techframework.pdf&usg=AOvVaw1nOy1zOiCc_LEI7EY2j_t9

company specialized in dredging, with lot of experience though biased.

https://dredgeamerica.com/?gclid=EAlaIqobChMI8dq- O_g3wIVh1mGCh2-4wdmEAMYAiAAEgLSC_D_BwE

sediment sorting during dredging and placement

http://rsm.usace.army.mil/initiatives/facts/2018/FY18_SAJ-CHL_FS_SedimentSorting.pdf

Pamphlets on facts related to dredging

<https://www.iadc-dredging.com/ul/cms/fck-uploaded/documents/PDF%20Publications/dredging-literature-dredging-the-facts.pdf>

Reversing & Warning Alarms



Available Brochure

Reversing & Warning Alarms

Vital safety devices needed to warn workers and pedestrians that a vehicle is manoeuvring. Our range includes bbs-tek® white sound® alarms; smart alarms which adjust to the ambient noise level; and speaking alarms, which provide a real speech warning of imminent danger.

Which alarm is for you?

Heavy duty

For plant, quarry and construction machines or environments with high ambient noise.



Medium duty

Ideal for commercial road going vehicles and environments with mid-level ambient noise.



bbs-tek® white sound®

The safest alarms in the world due to their instant locatability and directional sound. The multi-frequency alarms are only heard in the danger zone, thus eliminating noise nuisance for local residents.



Model

Part No:

WHITE SOUND® SMART REVERSING ALARM



SA-BBS-107 - Self-adjusting heavy-duty - 87-107 Decibels

1400

- 12-24Vdc
- IP68
- Size (WxHxD)
172 x 79 x 95mm
- Lifetime warranty

Features

- Alarm continually adjusts to 5-10dB above ambient
- Multi-frequency broadband sound
- Instantly locatable
- Sound confined to danger area
- Eliminates noise nuisance
- Sounder unit: Driver
- Hole centres (mm): 153

Power

- Current: Max 1 Amp

Durability & standards

- Mechanical vibration: 10G
- Operating temperature: -40 to +85°C
- CE marked
- EMC approved: E
- SAE J994

WHITE SOUND® SMART REVERSING ALARM



SA-BBS-97 - Self adjusting - medium duty - 77-97 Decibels

1399

SA-BBS-97HV - Self adjusting - electric forklift - 77-97 Decibels

1398

- 12-24Vdc
- 36-80Vdc (HV)
- IP68
- Size (WxHxD)
127 x 76 x 65mm
- Lifetime warranty

Features

- Alarm continually adjusts to 5-10dB above ambient
- Multi-frequency white sound alarm
- Instantly locatable
- Sound confined to danger area
- Eliminates noise nuisance
- Sounder unit: Driver
- Hole centres (mm): 98-108

Power

- Current: Max 1 Amp

Durability & standards

- Mechanical vibration: 10G
- Operating temperature: -40 to +85°C
- CE marked
- EMC approved: E
- SAE J994
- NAS/PIEK approved for night-time delivery

WHITE SOUND® REVERSING ALARM



BBS-107 - Heavy duty - 107 Decibels

0899

BBS-102 - Heavy duty - 102 Decibels

0898

- 12-24Vdc
- IP68
- Size (WxHxD)
172 x 79 x 95mm
- Lifetime warranty

Features

- Multi-frequency broadband sound
- Instantly locatable
- Sound confined to danger area
- Eliminates noise nuisance
- Sounder unit: Driver
- Hole centres (mm): 153

Power

- Current: Max 1 Amps

Durability & standards

- Mechanical vibration: 10G
- Operating temperature: -40 to +85°C
- CE marked
- EMC approved: E
- SAE J994

Every American Born Will Need...

1.94 Troy oz.
Gold

1.28 million lbs.
Stone, Sand, & Gravel

867 lbs.
Lead

347,429 lbs.
Coal

plus 43,813
lbs

Other Minerals
& Metals

3.03 million pounds of minerals, metals, and fuels in their lifetime



2,206 lbs.
Bauxite
(Aluminum)

473 lbs.
Zinc

19,227 lbs.
Iron Ore

1,024 lbs.
Copper

73,334 gallons
Petroleum

15,366 lbs.
Phosphate

26,634 lbs.
Salt

11,190 lbs.
Clays

6.92 million cu. ft.
Natural Gas

51,614 lbs.
Cement

EVERY YEAR

38,449 pounds of new minerals must be provided for every person in the United States to make the things we use daily

9,426 lbs.

Stone used to make roads, buildings, bridges, landscaping, numerous chemical and construction uses

6,768 lbs.

Sand & Gravel used to make concrete, asphalt, roads, blocks & bricks

655 lbs.

Cement used to make roads, sidewalks, bridges, buildings, schools, houses

244 lbs.

Iron Ore used to make steel—buildings, cars, trucks, planes, trains, other construction, containers

338 lbs.

Salt used in various chemicals, highway deicing, food & agriculture

195 lbs.

Phosphate Rock used to make fertilizers to grow food, animal feed supplements

142 lbs.

Clays used to make floor & wall tile, dinnerware, kitty litter, bricks & cement, paper

28 lbs.

Aluminum (Bauxite) used to make buildings, beverage containers, autos, airplanes

13 lbs.

Copper used in buildings, electrical & electronic parts, plumbing, transportation

11 lbs.

Lead 75% used for transportation—batteries, electrical, communications

6 lbs.

Zinc used to make metals rust resistant, various metals & alloys, paint, rubber, skin creams, health care, and nutrition

34 lbs.

Soda Ash used to make all kinds of glass, in powdered detergents, medicines, as a food additive, photography, water treatment

4 lbs.

Manganese used to make almost all steel for construction, machinery, transportation

535 lbs.

Other Nonmetals used in glass, chemicals, soaps, paper, computers, cell phones, etc.

21 lbs.

Other Metals used in electronics, TV & video equipment, recreation equipment, etc.

Including These Energy Fuels

- 930 gallons of Petroleum
- 87,817 cu. ft. of Natural Gas
- 4,409 lbs. of Coal
- 0.2 lb. of Uranium

To generate the energy each person uses in one year—



Zoning Map

Stockley Materials, LLC

MLJCX18004



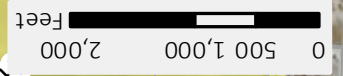
Agricultural Residential



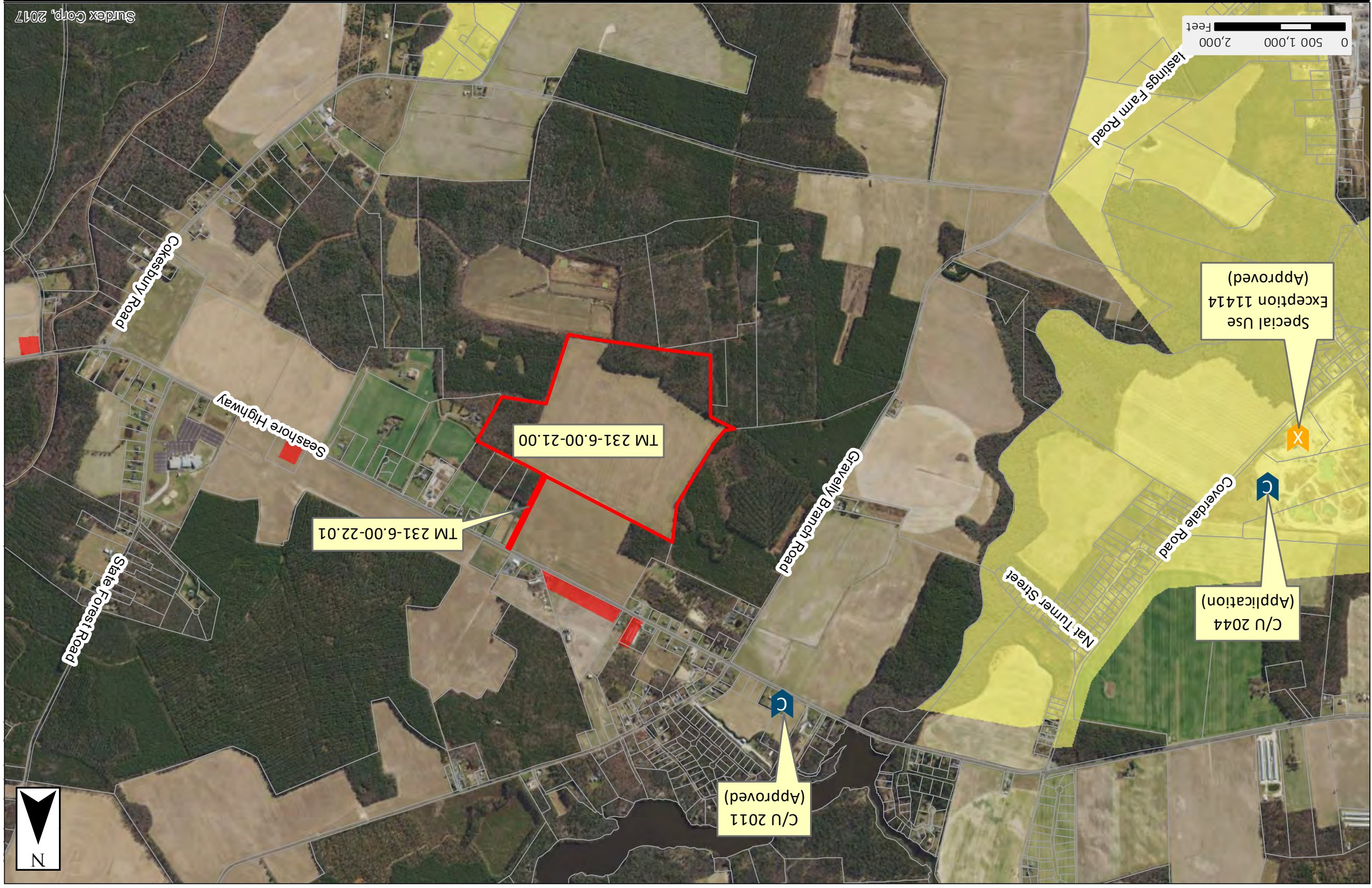
General Residential



General Commercial



Surdex Corp, 2017



Special Use Exception 11414 (Approved)

C/U 2044 (Application)

C/U 2011 (Approved)

TM 231-6.00-21.00

TM 231-6.00-22.01



2015 State Strategies & Investment Levels

Stockley Materials, LLC

MLJCX18004



Investment Level

Level 4

Out of Play



Surdex Corp, 2017



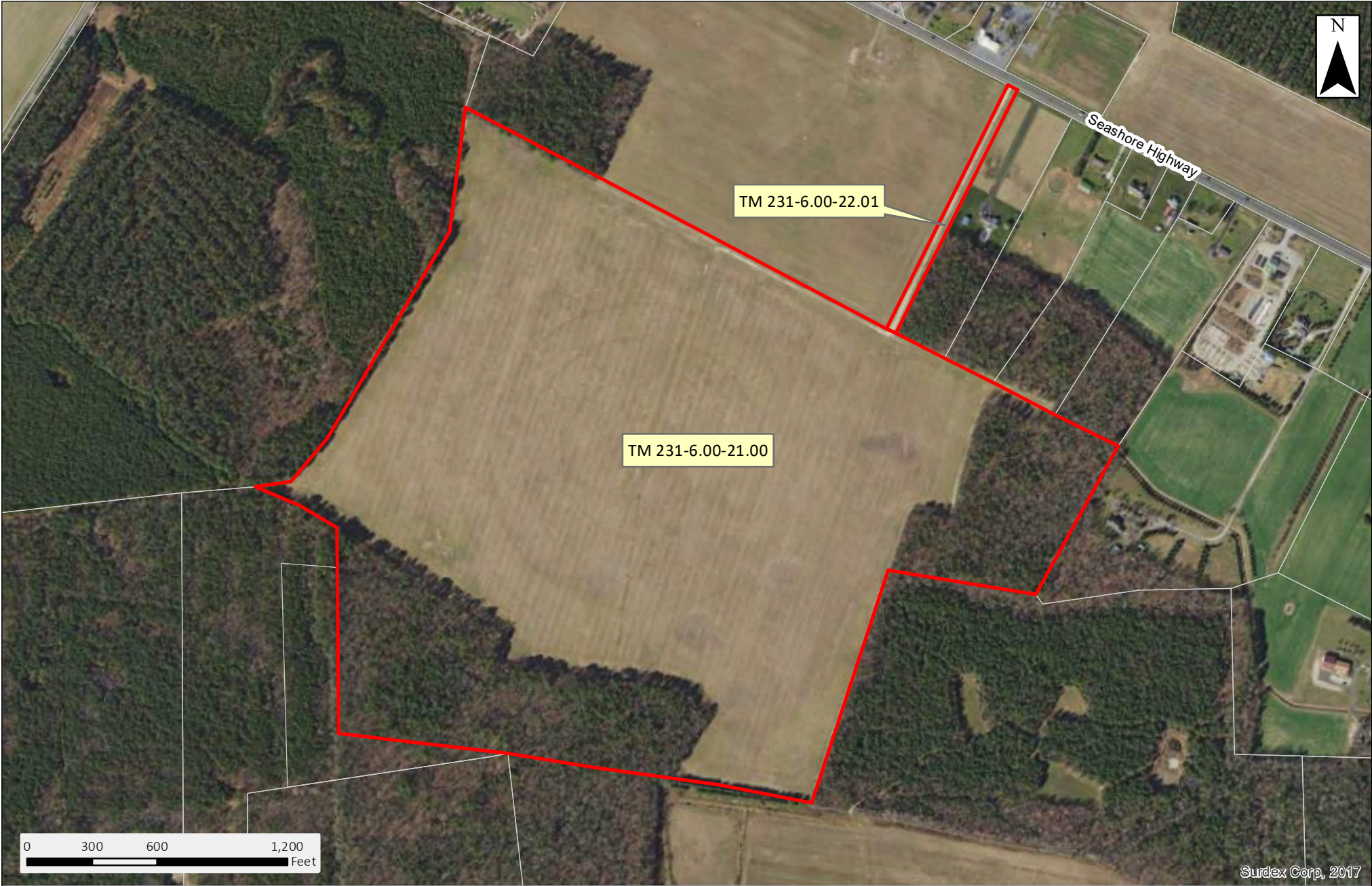


Figure 1 of 19.

1

2017 Orthophoto

Stockley Materials, LLC

MLJCX18004



Subject Parcels



Other Tax Parcels



Figure 2 of 19.

2

2012 Orthophoto

Stockley Materials, LLC

MLJCX18004



Subject Parcels



Other Tax Parcels



Figure 3 of 19.

3

2007 Orthophoto

Stockley Materials, LLC

MLJCX18004



Subject Parcels



Other Tax Parcels



Figure 4 of 19.

4

2002 Orthophoto

Stockley Materials, LLC

MLJCX18004



Subject Parcels



Other Tax Parcels



Figure 5 of 19.

5

1997 Orthophoto

Stockley Materials, LLC

MLJCX18004



Subject Parcels



Other Tax Parcels

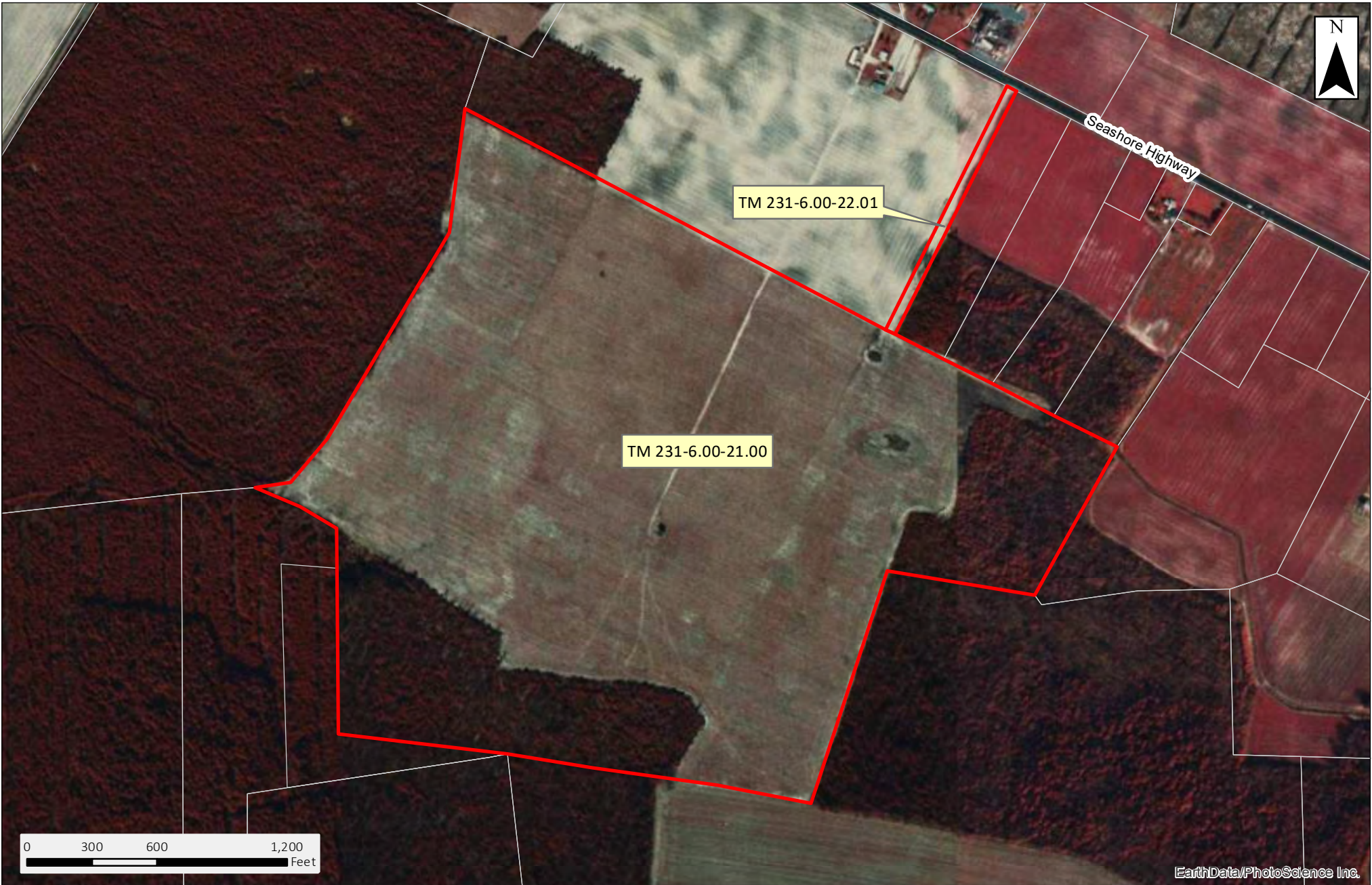


Figure 6 of 19.

6

1992 Orthophoto

Stockley Materials, LLC

MLJCX18004



Subject Parcels



Other Tax Parcels



Figure 7 of 19.

7

1968 Orthophoto

Stockley Materials, LLC

MLJCX18004



Subject Parcels



Other Tax Parcels



Figure 8 of 19.

8

1961 Orthophoto

Stockley Materials, LLC

MLJCX18004



Subject Parcels



Other Tax Parcels



Figure 9 of 19.

9

1954 Orthophoto

Stockley Materials, LLC

MLJCX18004



Subject Parcels



Other Tax Parcels

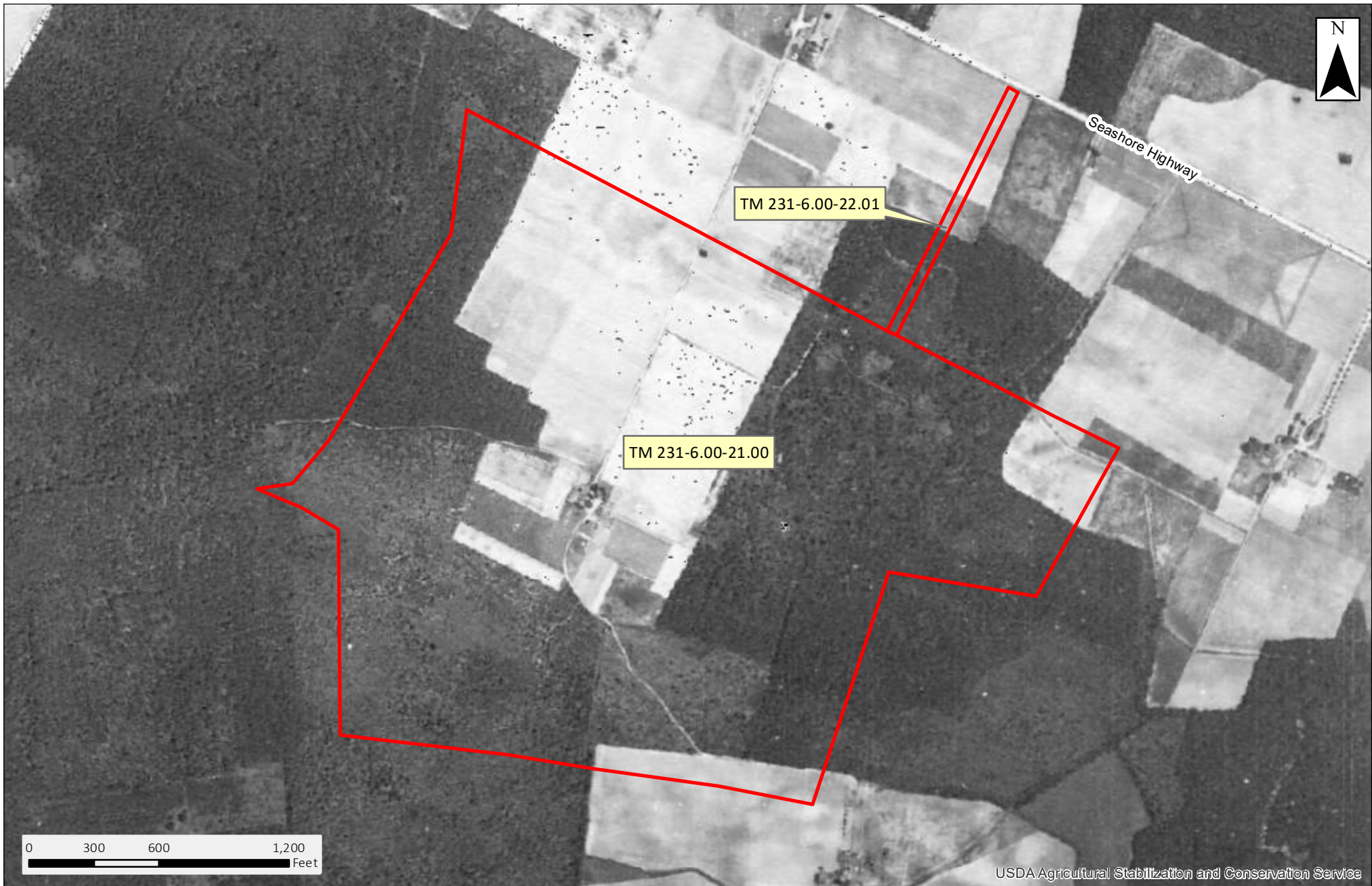


Figure 10 of 19.

10

1937 Orthophoto

Stockley Materials, LLC

MLJCX18004



Subject Parcels



Surdex Corp, 2017

Figure 11 of 19.

11

2015 State Strategies & Investment Levels

Stockley Materials, LLC

MLJCX18004



Investment Level

Level 4 Out of Play

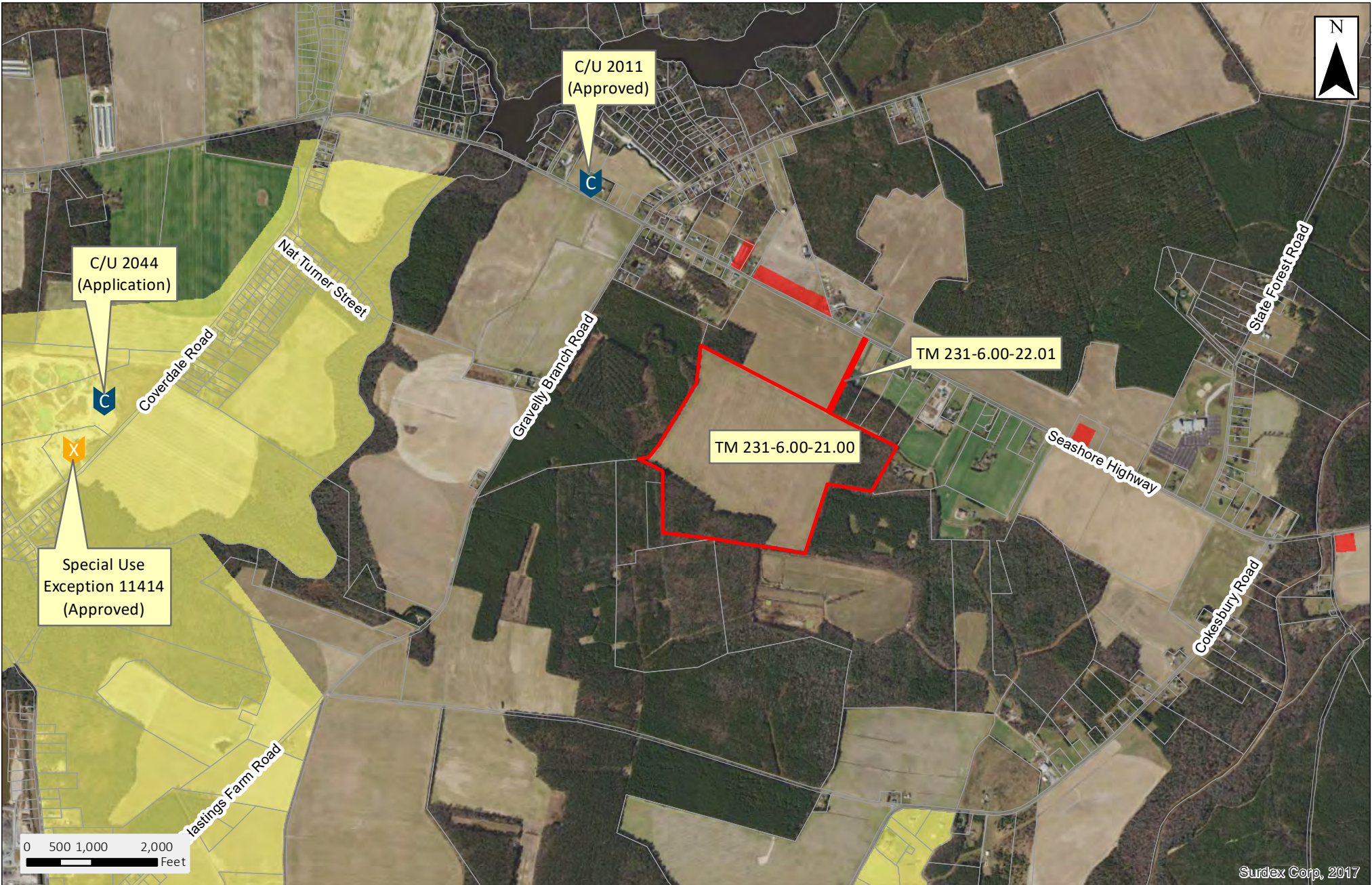


Figure 12 of 19.
12

Zoning Map

Stockley Materials, LLC
MLJXC18004



- Agricultural Residential
- General Residential
- General Commercial

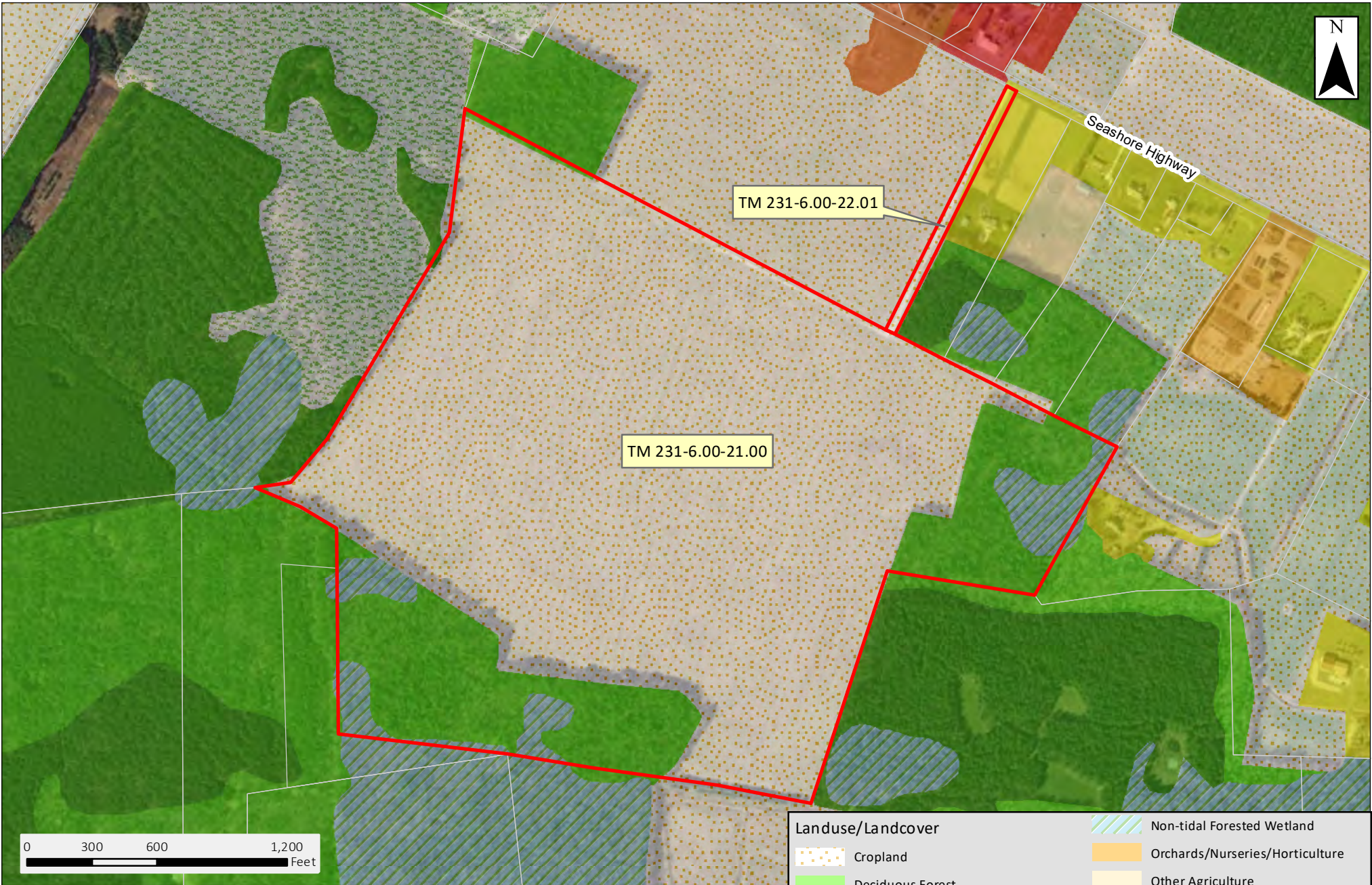


Figure 13 of 19.

13

2012 Land Use/Land Cover

Stockley Materials, LLC

MLJCX18004



Landuse/Landcover	
	Cropland
	Deciduous Forest
	Evergreen Forest
	Farmsteads & Farm Related Buildings
	Mixed Forest
	Non-tidal Forested Wetland
	Orchards/Nurseries/Horticulture
	Other Agriculture
	Retail Sales/Wholesale/Professional
	Shrub/Brush Rangeland
	Single Family Dwellings

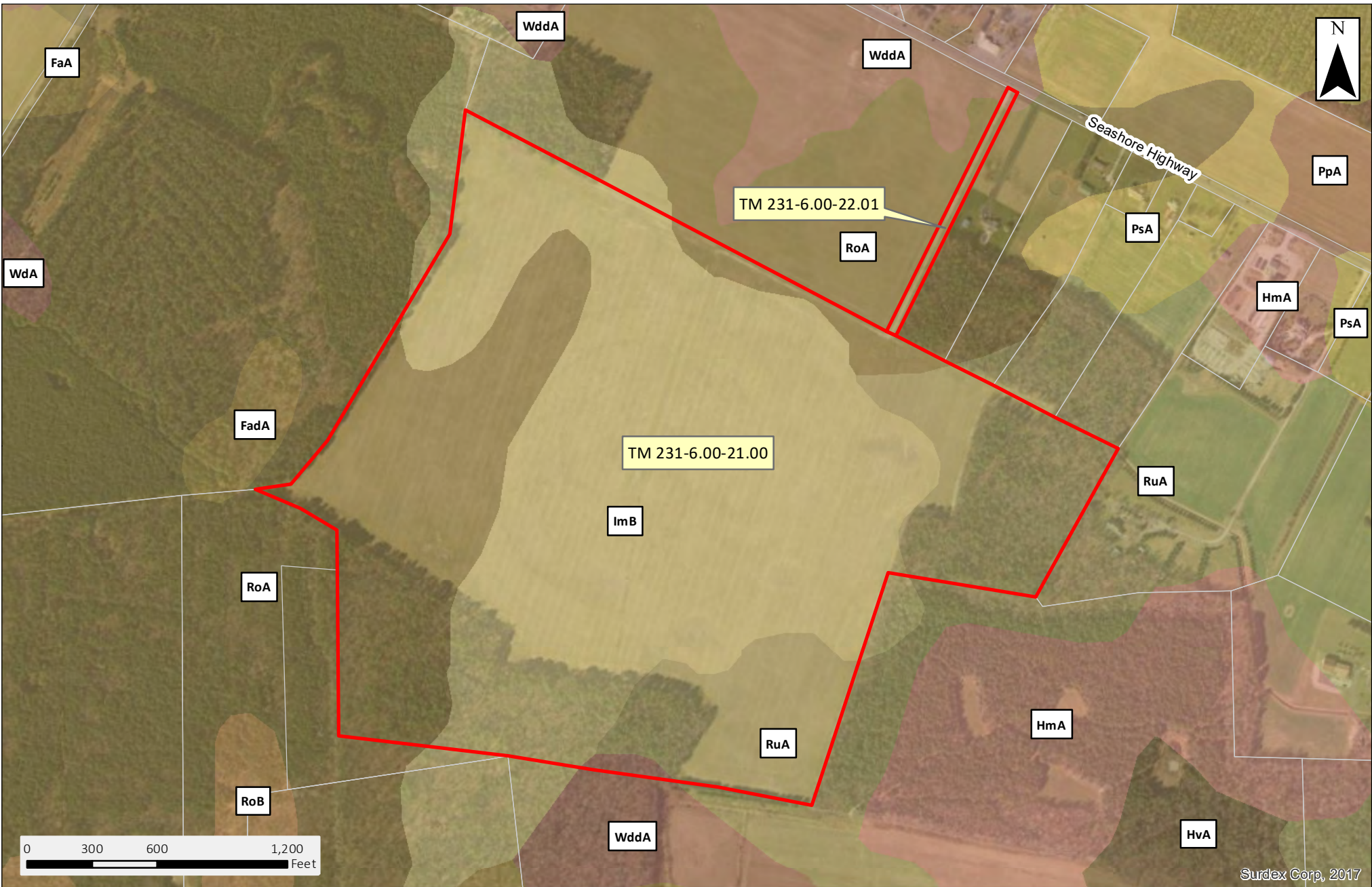


Figure 14 of 19.
14

NRCS Soils Map
Stockley Materials, LLC
MLJCX18004



Soil Types:
 ImB - Ingleside-Hammonton-Fallsington complex, 0-5% slopes
 RoA - Rosedale loamy sand, 0-2% slopes
 RuA - Runclint loamy sand, 0-2% slopes
 WddA - Woodstown sandy loam, 0-2% slopes, Northern Tidewater Area

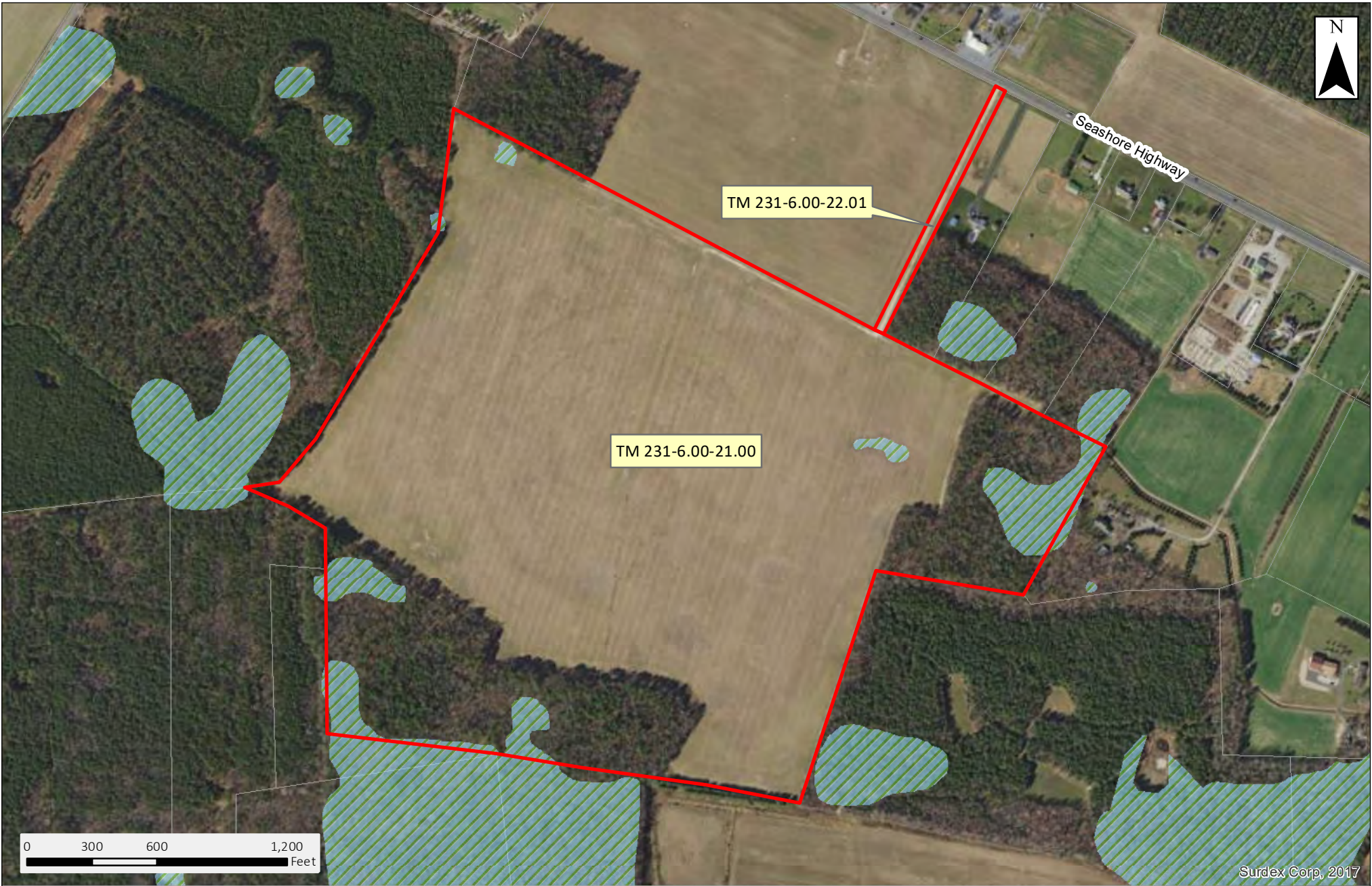


Figure 15 of 19.


15

State Wetlands Map

Stockley Materials, LLC

MLJCX18004



 Subject Parcels

 DNREC Wetlands




Figure 16 of 19.
16

FEMA Floodplain Map
Stockley Materials, LLC
MLJCX18004



 Subject Parcels

Flood Zone
 Zone X
Flood Map #10005C0260K (3/16/15)

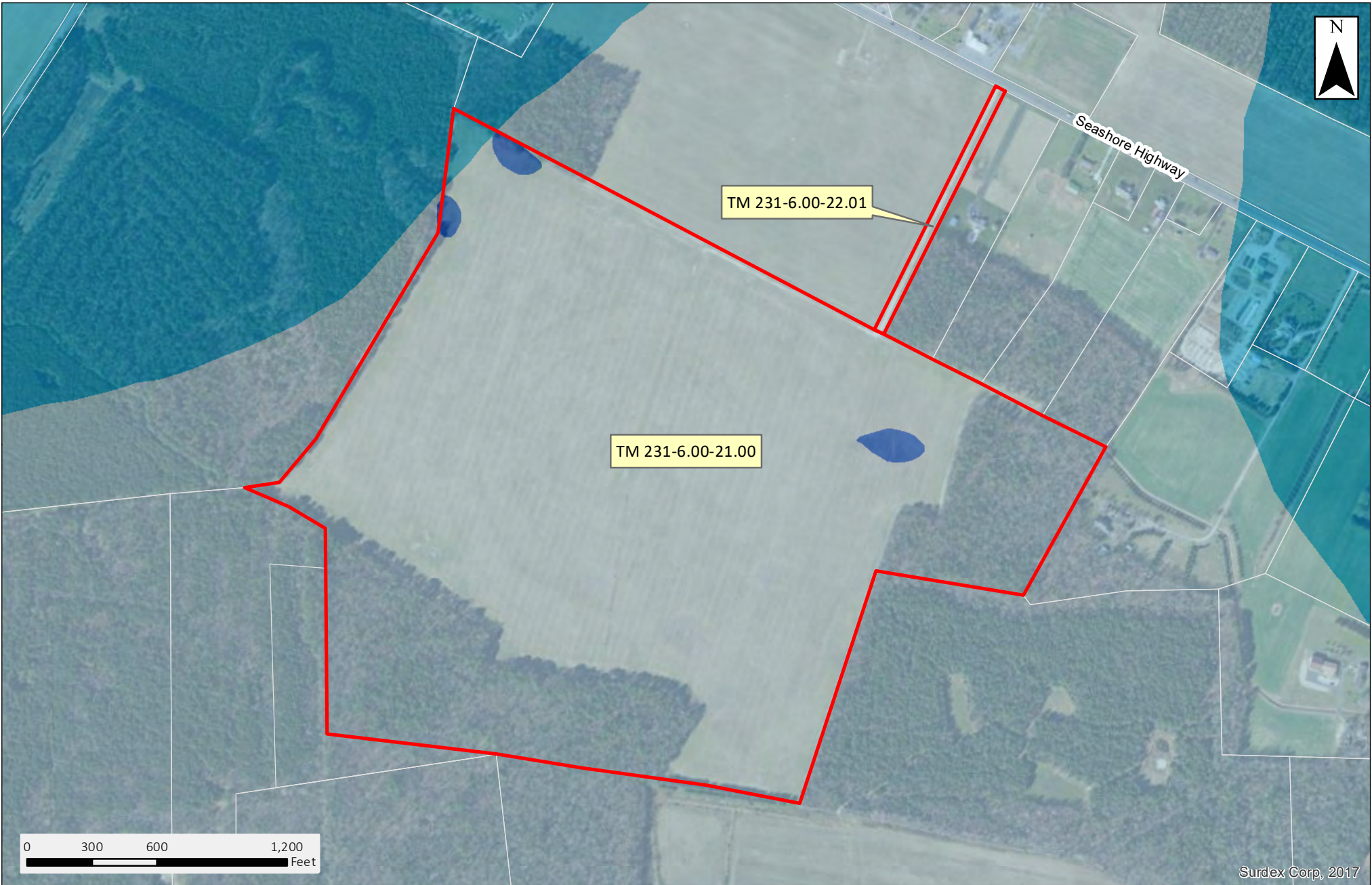


Figure 17 of 19.
17

Groundwater Recharge Potential

Stockley Materials, LLC
MLJCX18004



Recharge Potential

Fair

Good

Water Area

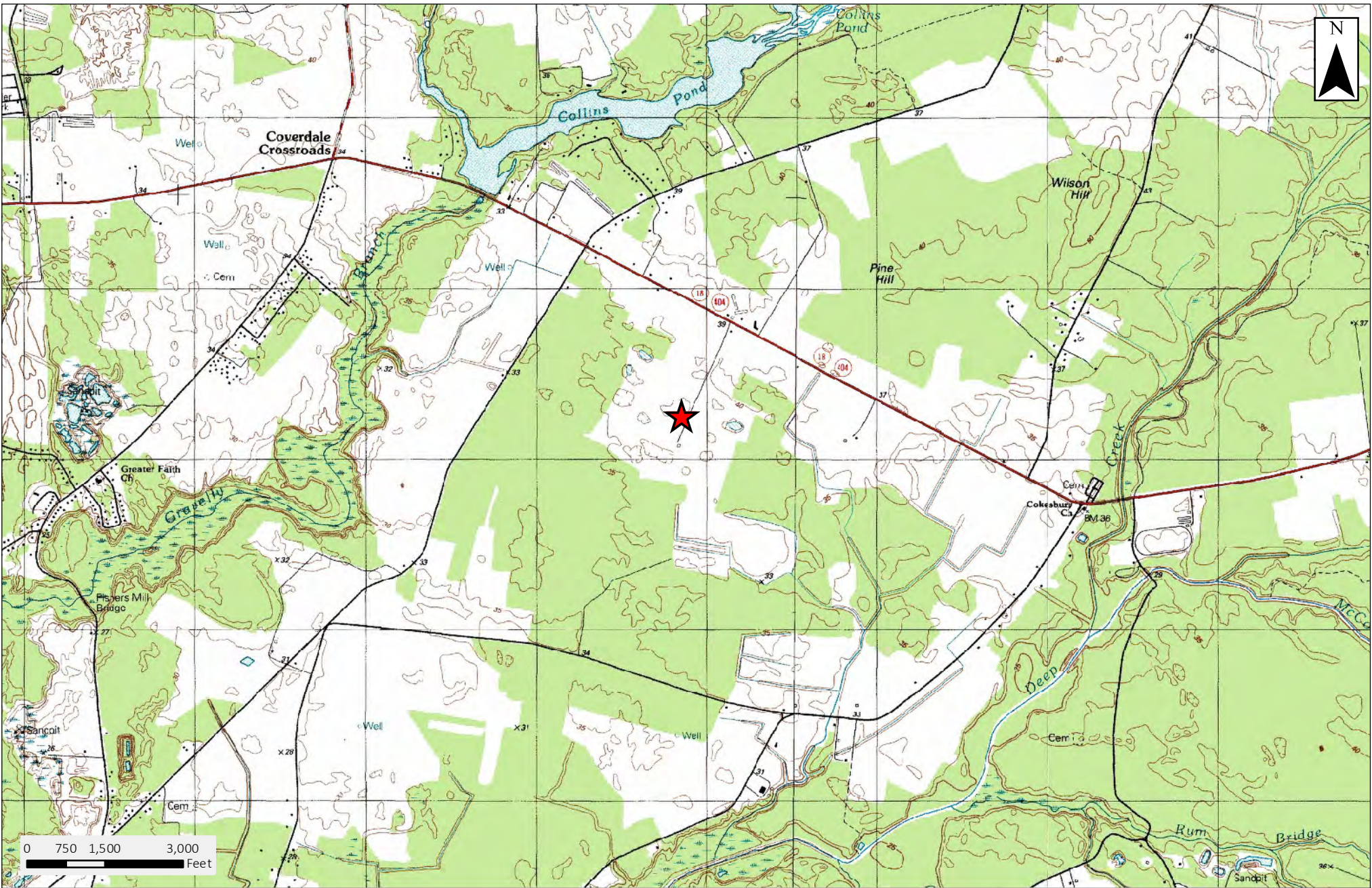


Figure 18 of 19.

18

USGS Topographic Map

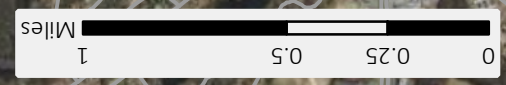
Stockley Materials, LLC

MLJXC18004





— Roads
□ Subject Parcels



STOCKLEY MATERIALS, LLC
(ML JOSEPH SAND & GRAVEL, INC.)

PROPOSED
FINDINGS OF FACT and CONDITIONS
C.U. 2155

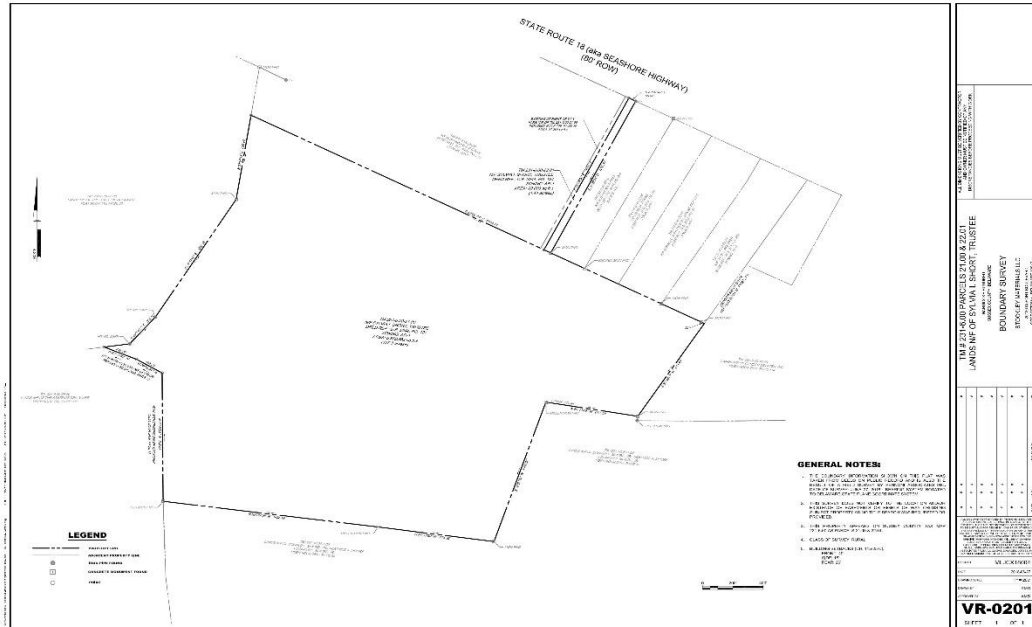
Findings of Fact

1. This is an application for a Conditional Use in an AR-1 Agricultural Residential District for excavation of a borrow pit, extraction, processing and removal of sand, gravel or stone, located on the south side of Seashore Highway (Delaware Route 18), Sussex County, Delaware. The property is identified as Tax Map 231-6.00 Parcels 21.00 & 22.01 and is located in the on the southwest side of Seashore Highway (Rt. 18) approximately 0.72 mile southeast of Gravely Branch Road in Nanticoke Hundred. The property consists of wooded and tilled areas and is currently being used and has been used for agricultural purposes.



2. The property is bordered on:
 - a. the north by a poultry growing facility; large residential lots and Seashore Highway

- b. the west by heavily wooded lands owned by the State of Delaware;
 - c. the south by heavily wooded lands in farmland protection; and
 - d. the east by wooded and farm land in farmland protection.
3. The property is under contract to be purchased by ML Joseph Sand & Gravel, Inc which is to be assigned to Stockley Materials, LLC.



4. This conditional use application is for 158.74 acres, more or less, and is subject to the provisions of Articles IV through XX, § 115-22 and § 115-172 of the Zoning Code.
5. The purpose of a Conditional Use is to provide for certain uses which cannot otherwise be well adjusted to their environment in particular locations with full protection offered to surrounding properties by rigid application of the district regulations.
6. A borrow pit use is generally of a public or semipublic character and is essential and desirable for the general convenience and welfare but, because of the nature of the use, the importance of its relationship to the Comprehensive Plan and possible impact on neighboring properties, requires the exercise of planning judgment on location and site plan.

7. The granting of this application will provide a borrow pit for the processing and removal of sand, gravel, and stone, to be used in the construction of private and public works projects in the immediate area and throughout Sussex County.

8. The proposed use complies with Sussex County Code ARTICLE XXIV, Section 115-172 B. which contains Sussex County's "Special Requirements" relating to excavation or backfilling of borrow pits, extraction, processing and removal of sand, gravel or stone, stripping of topsoil (but not including stripping of sod) and other major excavations, provided that:

(1) No material may be brought from off the site for processing, mixing or similar purposes.

The applicant will comply with this requirement and no offsite materials will be brought to the site for processing, etc.

(2) The excavating, extraction or filling operation shall be controlled to offer reasonable protection to surrounding properties and the neighborhood, particularly as regards to odors, dust, air or water pollution and uses of roads or streets providing access to the site.

The applicant has designed the project so that all entrance, intersection and roadway improvements shall be completed in accordance with all DelDOT requirements.

The proposed access road will be located on Parcel 22.01, within the 50-foot width of the property, and will be paved and fenced from the entrance on Seashore Highway to Parcel 21.00. There is also a 25-foot wide easement in favor of Parcel 21.00 that runs parallel to Parcel 22.01 to provide for additional safe access to the Borrow Pit. The paved road will reduce dust and air pollution. The gated entrance with fencing down the access road will provide for additional safety from the borrow pit.

Additional fencing, berms, entrance gates and signage will be installed to discourage and reduce access to the property.

The Applicant has the skills, experience and equipment to provide dust control through the use of its water trucks as well as to keep the roads free of sediment from the trucks leaving the site with the use of a street sweeper.

Equipment within the borrow pit will be equipped with bbs-tek white sound alarms which adjust to the ambient noise level that provides a real speech warning of imminent danger. These alarms are only heard in the danger zone which eliminates noise nuisances for neighboring properties and residents.

Reversing & Warning Alarms

BRIGADE

bbs-tek® White Sound® Warning Alarms

Vehicle Safety Solutions

Available Brochure

Reversing & Warning Alarms

Vital safety devices needed to warn workers and pedestrians that a vehicle is manoeuvring. Our range includes bbs-tek® white sound® alarms; smart alarms which adjust to the ambient noise level; and speaking alarms, which provide a real speech warning of imminent danger.

Which alarm is for you?

Heavy duty
For plant, quarry and construction machines or environments with high ambient noise.

Medium duty
Ideal for commercial road going vehicles and environments with mid-level ambient noise.

bbs-tek® white sound®
The safest alarms in the world due to their instant locatability and directional sound. The multi-frequency alarms are only heard in the danger zone, thus eliminating noise nuisance for local residents.

QUIET MARK

45

(3) The location of the excavation, extraction or filling with respect to property lines, the depth of excavation or filling and relation to the water table or flood criteria and the slope of the sides of the excavation shall be controlled to prevent a continuing unsightly, hazardous or wasteful condition of the land.

The proposed pit is not in any flood plain area.

The proposed pit is greater than 50-feet from all property lines.

Where practical a minimum 4-foot high berm will be placed around the perimeter of the proposed pit.

The proposed pit will have 3:1 side slope down to a 10-foot level bench that will be approximately near or 1-foot below the static water surface. Below the water level the slopes will be 2:1.

The water table is approximately 5 feet below the existing grade.

The depth of the proposed borrow pit will not exceed 65-feet.

Only the trees within the area of the proposed pit will be disturbed. All other existing trees will remain.

Wetlands onsite will not be disturbed and will be buffered during pit excavation.

There are no known endangered species located onsite.

(4) The Borrow Pit shall be surrounded by a landscaped unexcavated buffer strip of open space a minimum distance of 100 feet from any street lines and a minimum distance of 50 feet from all other property lines. The buffer strip shall remain free of any buildings or streets.

The plans submitted with the application show a minimum 50-foot landscape buffer around the entire proposed Borrow Pit. The majority of the Borrow Pit is greater than 50-feet from property lines.

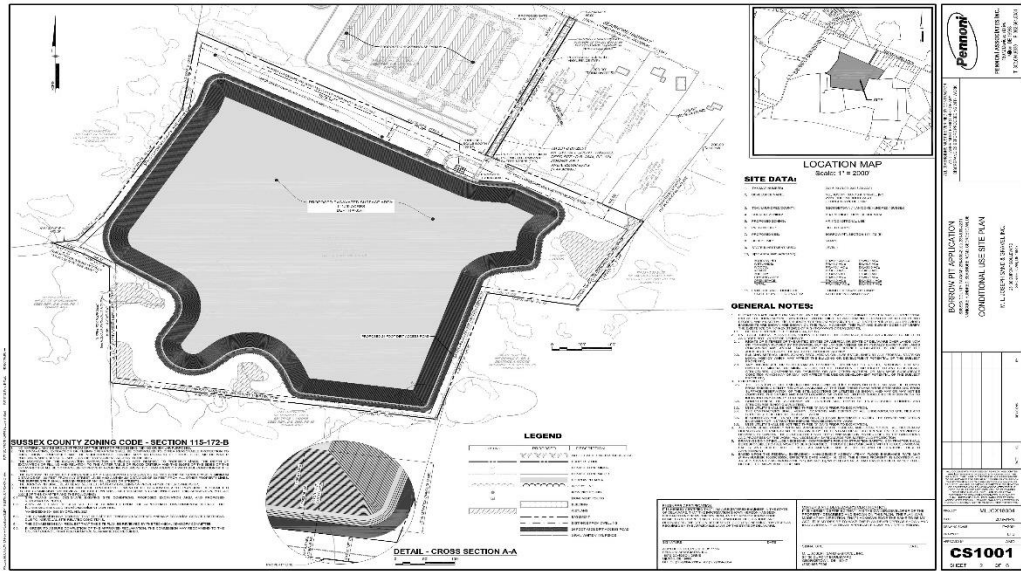
The proposed borrow pit will be located approximately 1,450-feet from Seashore Highway which exceeds the 100-foot minimum requirement.

(5) The Borrow Pit shall be at least 200 feet from any dwelling on property of other ownership.

All excavation of the proposed pit will occur more than 200' from any adjacent dwellings.

(6) Prior to issuance of a notice to proceed with development of the Borrow Pit, a site plan shall be submitted to the Commission for review. The site plan shall be prepared in compliance with this subsection, Article XXVIII of this chapter and the following:

(a) Site plans shall designate existing site conditions, proposed excavation area and proposed reclamation plans.



(b) Approvals shall be required to be submitted from the appropriate governmental agency for ingress/egress and erosion/sediment control.

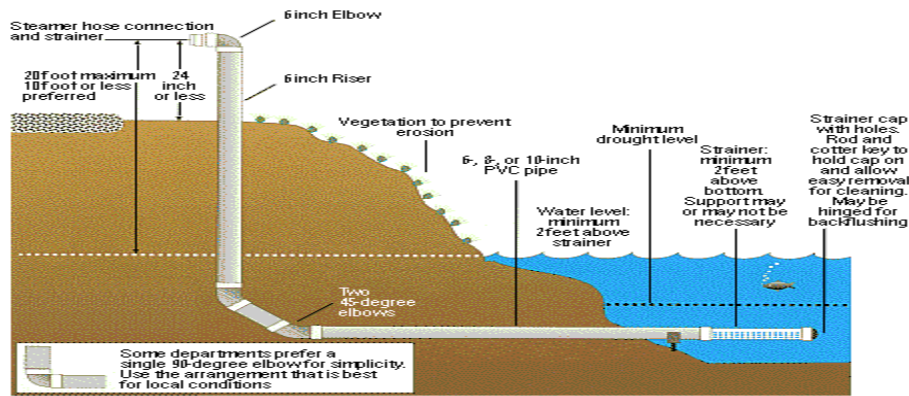
All entrance, intersection, roadway and multi-modal (shared use path) improvements shall be completed by the applicant in accordance with all DelDOT requirements.

The stormwater management control system shall meet or exceed the requirements of Sussex Conservation District and DNREC through a combination of Best Management Practices (BMP) and Best Available Technologies (BAT).

9. The proposed conditional use will not increase the congestion of roads or streets as confirmed by DelDOT, which did not require a Traffic Impact Study and determined that the borrow pit's impact would be negligible on the adjacent roads. Per the 2017 Delaware Vehicle Volume Summary, the annual average daily traffic volumes on an average day along Seashore Highway are 9,839 to 12,652 vehicles per day.
10. The proposed pit will use the existing irrigation well currently onsite. A need for any additional wells will be per permitted by DNREC.
11. Sanitary Sewer will be provided through the use of a Delaware State Licensed Port-O-Potty company. No onsite wastewater disposal system will be needed for the proposed pit.
12. The proposed pit will be able to supply the necessary material needed, such as, sand and gravel that are used to make concrete, asphalt, roads, blocks and bricks; cement that is used to make roads, sidewalks, bridges, buildings, schools and houses; clays that are used to make floor and wall tile, bricks and cement, etc. which is essential to keeping up with the energy and material demands of every person.



13. The applicant will install a permanent dry-hydrant, non-pressurized pipe system in the borrow pit that will provide a suction supply of water to a fire department tank truck. In rural areas where municipal or public water systems are not available, dry hydrants are used to supply water for fighting fires. The applicant places these dry-hydrants in all of its borrow pits and allows the area volunteer fire company's access to the water necessary for them to provide fire protection to the communities they serve.



14. The proposed conditional use meets the general purpose of the Zoning Ordinance and Comprehensive Plan as it is being located in an appropriate location providing sufficient area for uses of this nature which in other locations may not be able to be as well adjusted to its environment.
15. Through the placement of appropriate conditions of approval, the impact of the borrow pit on neighboring properties will be significantly reduced.
16. The conditional use requested will promote the health and safety of the inhabitants of Sussex County and is essential and desirable for the general convenience, orderly growth, prosperity and welfare of the County, particularly for any projects that have been or may be approved for development.

Conditional Use 2155 - Conditions of Approval

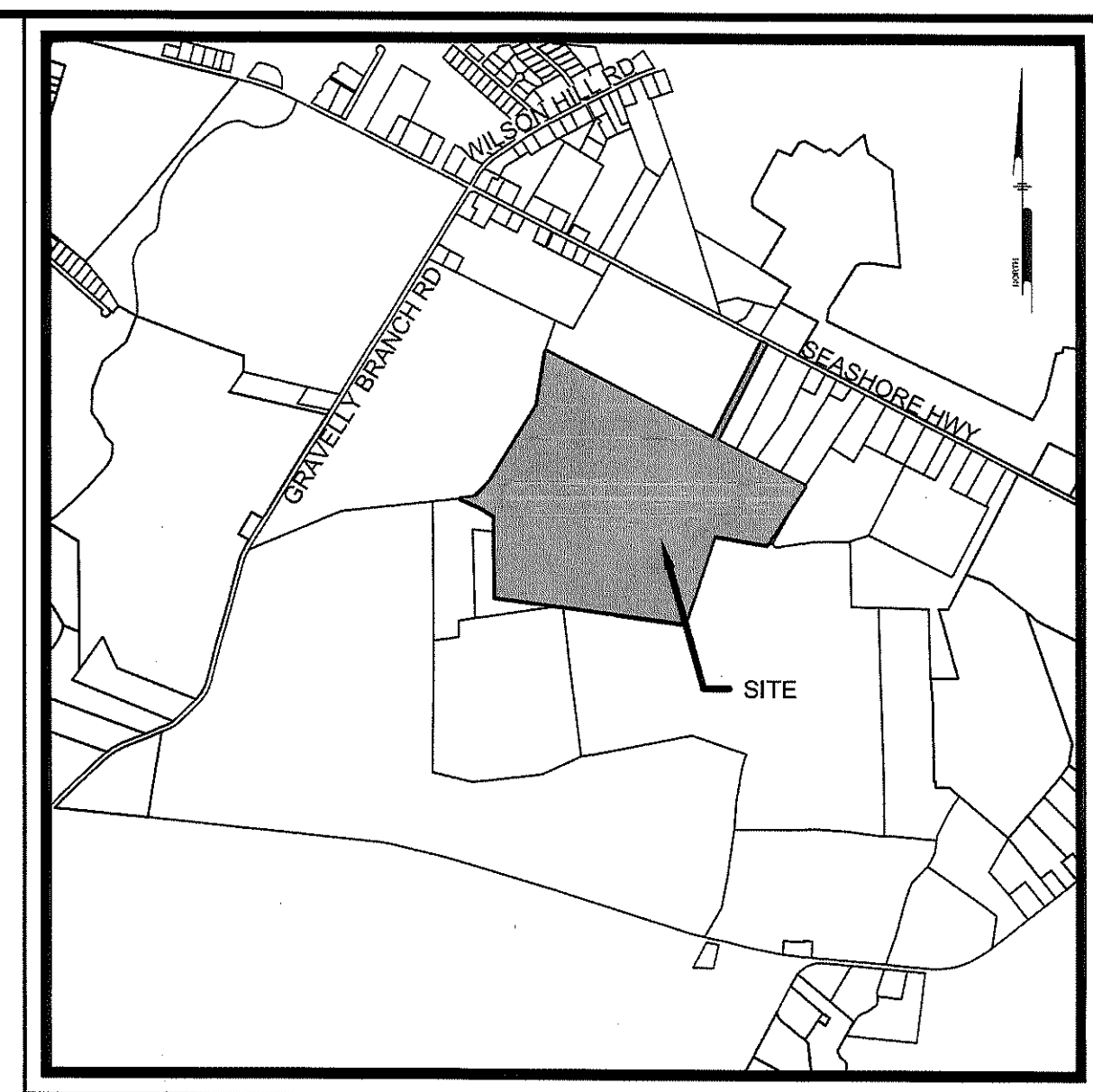
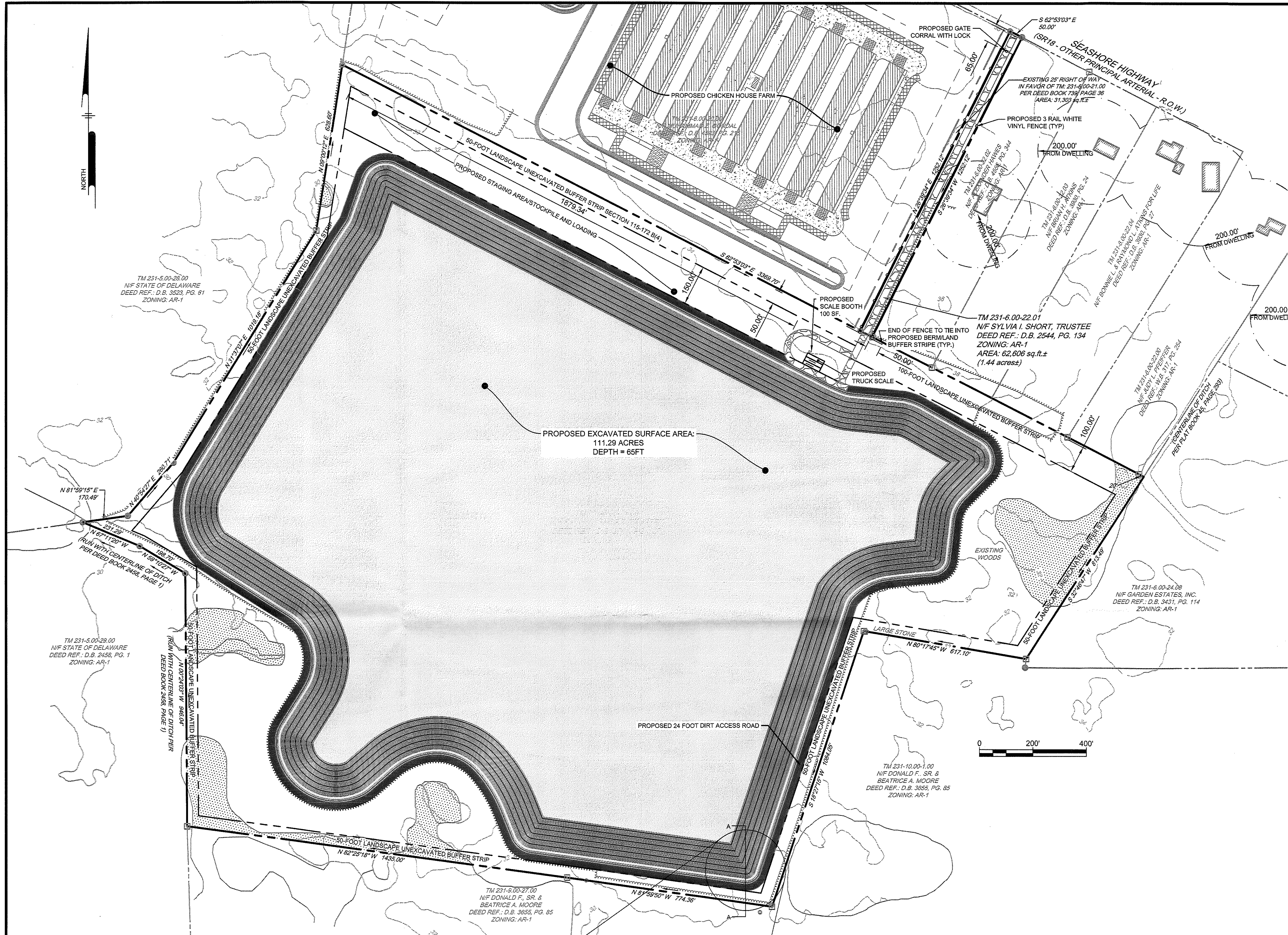
Approval is subject to the following conditions:

- A. The applicant shall submit, as part of the final site plan, a reclamation plan showing how the borrow pit will be designed while protecting existing and future developments with the awareness and appreciation of the adjacent protected natural environment.
- B. The project shall comply with S.C. Code § 115-172 B, relating to excavation or backfilling of borrow pits, extraction, processing and removal of sand, gravel or stone, stripping of topsoil (but not including stripping of sod) and other major excavations
- C. No material may be brought from off the site for processing, mixing or similar purposes.
- D. The borrow pit shall be surrounded by a landscaped unexcavated buffer strip of open space a minimum distance of 100 feet from any street lines and a minimum distance of 50 feet from all other property lines. The buffer strip shall remain free of any buildings or streets.
- E. The excavated area shall not exceed 112-acres.
- F. A water truck will be available to control dust from interior truck traffic when conditions require.
- G. No materials will be stored on any access roads or within any buffers.
- H. Markers and signage will be placed at appropriate locations to designate pit areas.
- I. No fuel storage tanks will be installed and all fueling shall be from fuel trucks that shall only be on site during business hours for refueling operations.

- J. No stumps, branches, debris or similar items will be buried on site.
- K. All entrance intersection roadway and multi-modal (shared use path) improvements shall be completed by the Applicant as required and in accordance with all DeIDOT requirements
- L. Construction and site work on the property including deliveries of materials to or from the property shall only occur between 6 am and 6 pm Monday thru Friday and between 6 am and 2 pm on Saturday's, there shall be no excavation activities on the site on Sundays.
- M. The borrow pit entrance shall have a fenced gate, which shall be secured when the operation is closed.
- N. The project will meet or exceed stormwater management system regulations set forth by the Sussex Conservation District and DNREC through a combination of Best Management Practices (BMP) and Best Available Technologies (BAT).
- O. The permit shall terminate upon the expiration of fifty (50) years from the date of enactment.
- P. The final site plan shall contain the approval of Sussex County Conservation District for the design and location of all stormwater management areas and erosion and sedimentation control facilities.
- Q. The wetlands area on this site shall not be disturbed and shall be protected to the greatest extent possible.
- R. All safety lights shall be downward screen, so they do not shine on neighboring properties or roadways.
- S. The applicant shall secure all other licenses and permits required for the use of the

premises as a borrow pit from all state or federal agencies with jurisdiction over the use of the property and shall otherwise comply with all applicable rules, regulations, statutes or ordinances relating to the use of the premises as a borrow pit.

- T. The final site plan shall be subject to the review and approval of the Sussex County Planning and Zoning Commission.



LOCATION MAP
Scale: 1" = 2000'

SITE DATA:

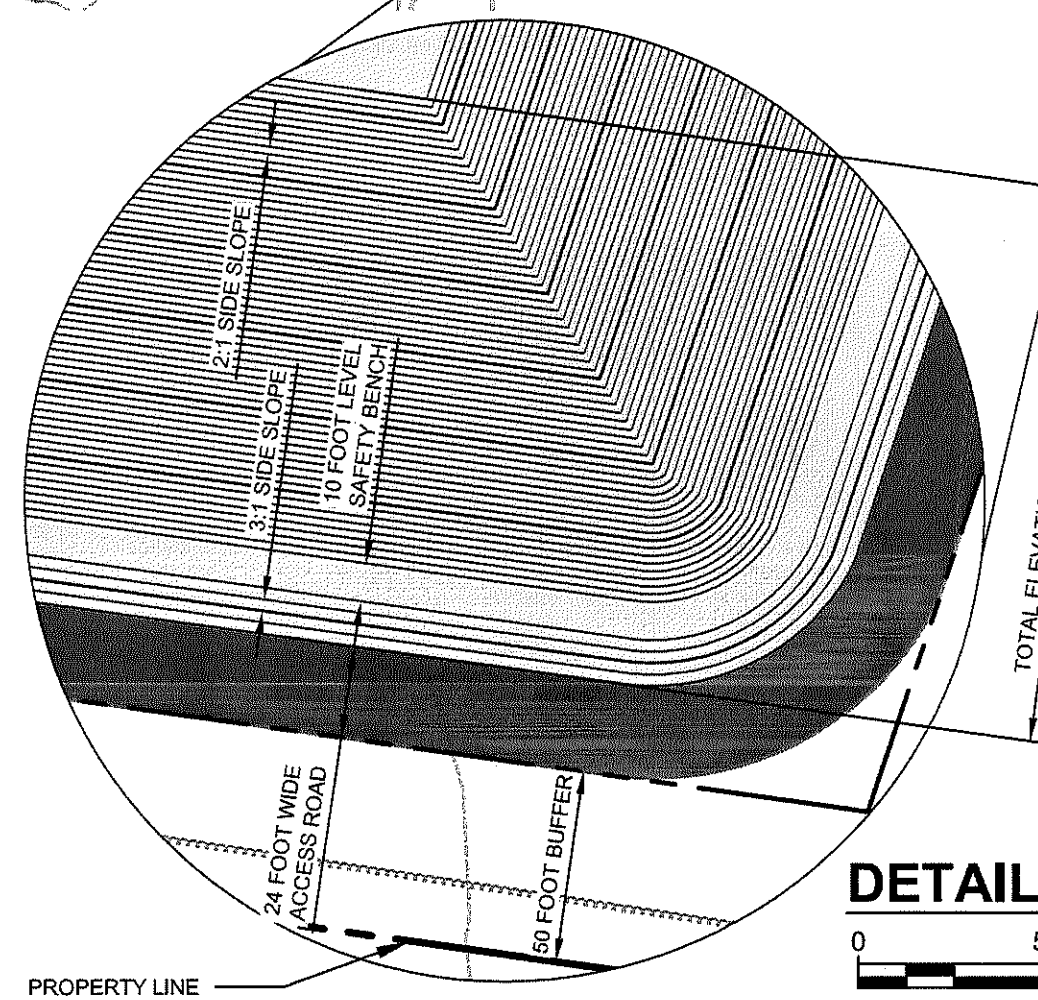
1. TAX MAP NUMBER:	231-6.00-21.00, 231-6.00-22.01
2. DEVELOPER NAME:	M.L. JOSEPH SANDS & GRAVEL, INC. 25136 DUPONT BOULEVARD GEORGETOWN, DE 19947
3. TOWN/HUNDRED/COUNTY:	GEORGETOWN / NANICOKE HUNDRED / SUSSEX
4. CURRENT ZONING:	AR-1 AGRICULTURAL RESIDENTIAL
5. PROPOSED ZONING:	AR-1/CONDITIONAL USE
6. PRESENT USE:	TILLED CROPS
7. PROPOSED USE:	BORROW PIT, SECTION 115-172-(B)
8. SPEED LIMIT:	50 MPH
9. STATE INVESTMENT AREA:	LEVEL 4
10. SITE AREA AND ACREAGE:	
BORROW PIT:	PR=111.3 AC ± EX=0.0 AC ±
WETLANDS:	PR=6.7 AC ± EX=6.7 AC ±
WOODS:	PR=13.1 AC ± EX=28.6 AC ±
ROADS:	PR=6.0 AC ± EX=0.0 AC ±
ROADS:	PR=12.3 AC ± EX=0.0 AC ±
BUFFER:	PR=7.2 AC ± EX=0.0 AC ±
STAGING AREA:	PR=1.9 AC ± EX=123.4 AC ±
OPEN SPACE:	PR=158.7 AC ± EX=158.7 AC ±
TOTAL:	
11. LATITUDE AND LONGITUDE STATE PLAN COORDINATES:	LONGITUDE: W-75°30'16.9041" LATITUDE: N 38°41'41.0872"

GENERAL NOTES:

- ELEVATIONS ARE BASED ON NAVD 88, AND DE STATE PLANE COORDINATE SYSTEM NAD 83 HORIZONTAL DATUM. THE BOUNDARY INFORMATION SHOWN ON THIS PLAN WAS COMPILED FROM DOCUMENTS OF PUBLIC RECORD AND AN ACTUAL FIELD SURVEY BY PENNONI ASSOCIATES, L.L.C., DATED APRIL 2017. ALL PROVIDED EASEMENTS ARE SHOWN AS SHOWN ON THIS PLAN, HOWEVER, THIS PLAN AND SURVEY DOES NOT VERIFY THE EXISTENCE OR NON-EXISTENCE OF RIGHT-OF-WAYS OR EASEMENTS.
- UNLESS SPECIFICALLY STATED OR SHOWN HEREON TO THE CONTRARY, THIS SURVEY IS MADE SUBJECT TO AND DOES NOT LOCATE OR DELINEATE:
 - RIGHTS OR INTEREST OF THE UNITED STATES OF AMERICA OR STATE OF DELAWARE OVER LANDS NOW OR FORMERLY FLOWED BY TIDEWATER, BUT NO LONGER VISIBLE OR PHYSICALLY EVIDENT, OR LANDS CONTAINING ANY ANIMAL, MARINE OR BOTANICAL SPECIES REGULATED BY OR UNDER THE JURISDICTION OF ANY FEDERAL, STATE, OR LOCAL AGENCY.
 - BUILDING SETBACK LINES, ZONING REGULATIONS OR LINES ESTABLISHED BY ANY FEDERAL, STATE OR LOCAL AGENCY WHICH MAY AFFECT THE BUILDING OR DEVELOPMENT POTENTIAL OF THE SUBJECT PROPERTY.
 - ANY SUBSURFACE OR SUBTERRANEAN CONDITION, EASEMENTS OR RIGHTS, INCLUDING, BUT NOT LIMITED TO MINERAL OR MINING RIGHTS, OR THE LOCATION OF OR RIGHTS TO ANY SUBSURFACE STRUCTURES, CONTAINERS OR FACILITIES OR ANY OTHER NATURAL OR MAN-MADE SUBSURFACE CONDITION WHICH MAY OR MAY NOT AFFECT THE USE OR DEVELOPMENT POTENTIAL OF THE SUBJECT PROPERTY.
- UTILITY NOTES:
 - THE LOCATION OF THE EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN HAVE BEEN TAKEN FROM EXISTING UTILITY RECORDS AVAILABLE AT THE TIME THESE PLANS WERE PREPARED AND FROM SURFACE OBSERVATION OF THE SITE. LOCATIONS OF UTILITIES AS SHOWN AND MAY OR MAY NOT BE COMPLETE, THE NATURE AND EXACT LOCATION OF EXISTING UTILITIES SHOULD BE VERIFIED PRIOR TO INITIATING ANY ACTIVITY THAT MAY AFFECT THEIR USE OR LOCATION.
 - COMPLETENESS OR ACCURACY OF LOCATION AND DEPTH OF UNDERGROUND UTILITIES AND STRUCTURES IS NOT GUARANTEED.
 - MISS UTILITY SHALL BE NOTIFIED THREE (3) DAYS PRIOR TO EXCAVATION.
 - THE CONTRACTORS SHALL VERIFY LOCATIONS AND DEPTHS OF ALL UNDERGROUND UTILITIES AND STRUCTURES BEFORE THE START OF WORK.
 - IF CONFLICTS ARE FOUND THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND DESIGN ENGINEER FOR INSTRUCTION BEFORE PROCEEDING WITH WORK.
 - MISS UTILITY SHALL BE NOTIFIED THREE (3) DAYS PRIOR TO EXCAVATION.
- ALL WORK SHALL COMPLY WITH ALL APPLICABLE STATE, FEDERAL AND LOCAL CODES. ALL NECESSARY LICENSES AND PERMITS SHALL BE OBTAINED BY THE CONTRACTOR AT HIS EXPENSE UNLESS PREVIOUSLY OBTAINED BY OWNER. THE CONTRACTOR SHALL ERRECT AND MAINTAIN, AS REQUIRED BY THE CONDITIONS AND PROGRESS OF THE WORK, ALL NECESSARY SAFEGUARDS FOR SAFETY AND PROTECTION.
- DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK TO BE PERFORMED. IT MUST BE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AS AMENDED AND ALL RULES AND REGULATIONS THERE TO APPLICABLE.
- BASED UPON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) NUMBER 100050260K, EFFECTIVE DATE MARCH 16, 2015, THE ENTIRE PROPERTY IS LOCATED IN AN AREA DESIGNATED AS FLOOD ZONE "X" (UNSHADED), WHICH IS AN AREA THAT HAS BEEN DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN.

SUSSEX COUNTY ZONING CODE - SECTION 115-172-B

- NO MATERIAL MAY BE BROUGHT FROM OFF THE SITE FOR PROCESSING, MIXING OR SIMILAR PURPOSES.
- THE EXCAVATING, EXTRACTION OR FILLING OPERATION SHALL BE CONTROLLED TO OFFER REASONABLE PROTECTION TO SURROUNDING PROPERTIES AND THE NEIGHBORHOOD, PARTICULARLY AS REGARDS TO ODORS, DUST, AIR OR WATER POLLUTION AND USES OF ROADS OR STREETS PROVIDING ACCESS TO THE SITE.
- THE LOCATION OF THE EXCAVATION, EXTRACTION OR FILLING WITH RESPECT TO PROPERTY LINES, THE DEPTH OF EXCAVATION OR FILLING AND RELATION TO THE WATER TABLE OR FLOOD CRITERIA AND THE SLOPE OF THE SIDES OF THE EXCAVATION SHALL BE CONTROLLED TO PREVENT A CONTINUING UNSIGHTLY, HAZARDOUS OR WASTEFUL CONDITION OF THE LAND.
- THE BORROW PIT SHALL BE SURROUNDED BY A LANDSCAPED UNEXCAVATED BUFFER STRIP OF OPEN SPACE A MINIMUM DISTANCE OF 100 FEET FROM ANY STREET LINES AND A MINIMUM DISTANCE OF 50 FEET FROM ALL OTHER PROPERTY LINES. THE BUFFER STRIP SHALL REMAIN FREE OF ANY BUILDINGS OR STREETS.
- THE BORROW PIT SHALL BE AT LEAST 200 FEET FROM ANY DWELING ON PROPERTY OF OTHER OWNERSHIP.
- PRIOR TO ISSUANCE OF A NOTICE TO PROCEED WITH DEVELOPMENT OF THE BORROW PIT, A SITE PLAN SHALL BE SUBMITTED TO THE COMMISSION FOR REVIEW. THE SITE PLAN SHALL BE PREPARED IN COMPLIANCE WITH THIS SUBSECTION, ARTICLE XXXIII OF THIS CHAPTER AND THE FOLLOWINGS:
 - SITE PLANS SHALL DESIGNATE EXISTING SITE CONDITIONS, PROPOSED EXCAVATION AREA AND PROPOSED RECLAMATION PLANS.
 - APPROVALS SHALL BE REQUIRED TO BE SUBMITTED FROM THE APPROPRIATE GOVERNMENTAL AGENCY FOR INGRESS/REGRESS AND EROSION/SEDIMENT CONTROL. [AMENDED 9-30-1986 BY ORD. NO. 382]
 - THE COMMISSION MAY REQUEST THAT THE SITE BE FENCED OR SCREENED AND MAY ESTABLISH GREATER SETBACKS DUE TO INDIVIDUAL SITE-RELATED CONDITIONS.
 - THE COMMISSION MAY REQUEST THAT THE SITE PLAN BE REVIEWED BY THE TECHNICAL ADVISORY COMMITTEE.
 - IN ORDER TO ASSURE COMPLETION OF THE APPROVED RECLAMATION, THE COMMISSION MAY RECOMMEND TO THE COUNTY COUNCIL THAT PERFORMANCE GUARANTIES BE REQUIRED.



DETAIL - CROSS SECTION A-A

LEGEND

EXISTING	PROPOSED	DESCRIPTION
[Symbol]	[Symbol]	24 FOOT WIDE PAVED ACCESS ROAD
[Symbol]	[Symbol]	PROPERTY LINE
[Symbol]	[Symbol]	CONTOUR LINE MINOR
[Symbol]	[Symbol]	CONTOUR LINE MAJOR
[Symbol]	[Symbol]	BORROW PIT AREA
[Symbol]	[Symbol]	WOOD'S LINE
[Symbol]	[Symbol]	IRON PIPE FOUND
[Symbol]	[Symbol]	MONUMENT FOUND
[Symbol]	[Symbol]	BUILDING
[Symbol]	[Symbol]	WETLANDS
[Symbol]	[Symbol]	EASEMENT
[Symbol]	[Symbol]	DISTANCE FROM DWELLING
[Symbol]	[Symbol]	24 FOOT WIDE DIRT ACCESS ROAD
[Symbol]	[Symbol]	3 RAIL WHITE VINYL FENCE

ENGINEER CERTIFICATION:
IT IS HEREBY CERTIFIED THAT I AM A REGISTERED ENGINEER IN THE STATE OF DELAWARE. THAT THE INFORMATION SHOWN HEREON HAS BEEN PREPARED UNDER MY SUPERVISION, AND TO MY BEST KNOWLEDGE AND BELIEF, IT COMPLIES WITH APPLICABLE STATE AND LOCAL REGULATIONS AND ORDINANCES. THE DESIGN REPRESENTS GOOD ENGINEERING PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.

SIGNATURE _____ DATE _____
ALAN DECKTOR, PE (DE PE#17771)
PENNONI ASSOCIATES, INC
18072 DAVIDSON DRIVE
MILTON, DE 19968
OFFICE (302) 884-8030 - FAX (302) 884-8054

OWNER'S AND DEVELOPER'S CERTIFICATION:
IT IS HEREBY CERTIFIED THAT I AM THE OWNER/DEVELOPER OF THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN. THE PLAN WAS MADE AT MY DIRECTION, THAT I ACKNOWLEDGE THE SAME TO BE MY ACT. IT IS MY DESIRE TO HAVE THE PLAN DEVELOPED AS SHOWN AND IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS.

SIGNATURE _____ DATE _____
M. L. JOSEPH SAND & GRAVEL INC.
25136 DUPONT BOULEVARD
GEORGETOWN, DE, 19947
(302)-856-7396

PENNONI ASSOCIATES INC.
18072 Davidson Drive
Milton, DE 19968
T 302.884.8030 F 302.684.8054

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

BORROW PIT APPLICATION
SUSSEX COUNTY TAX MAP: 231-6.00-21.00, 231-6.00-22.01
NANICOKE HUNDRED, SEASHORE HIGHWAY, GEORGETOWN, DE

CONDITIONAL USE SITE PLAN

M. L. JOSEPH SAND & GRAVEL INC.
25136 DUPONT BOULEVARD
GEORGETOWN, DE 19947

NO.	DATE	REVISIONS	BY

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OTHERS OR FOR THE EXTENSIONS OF THE PROJECT OR ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR APPROVAL BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LOSS OF EXPOSURE TO PENNONI ASSOCIATES, AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

PROJECT: **MLJXC18004**

DATE: 2019-01-10

DRAWING SCALE: 1"=200'

DRAWN BY: LFS

APPROVED BY: AMD

CS1001

SHEET 2 OF 6

PLANNING & ZONING COMMISSION

ROBERT C. WHEATLEY, CHAIRMAN
KIM HOEY STEVENSON, VICE-CHAIRMAN
DOUGLAS B. HUDSON
R. KELLER HOPKINS
HOLLY J. WINGATE



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 January 24, 2019

Application: CU 2157 Country Lawn Care & Maintenance, LLC

Applicant/Owner: Country Lawn Care & Maintenance, LLC
c/o Gerald J. Dougherty, II and Stephania Maria Dougherty
30435 Hollymount Road
Harbeson, DE 19951

Site Location: North side of Hollymount Road approximately 0.42 mile east of Beaver Dam Road.

Current Zoning: AR-1 (Agricultural Residential District)

Proposed Use: Landscaping Business

Comprehensive Land Use Plan Reference: Low Density Area

Councilmatic District: Mr. Burton

School District: Cape Henlopen School District

Fire District: Lewes Fire District

Sewer: Private, On-Site

Water: Private, On-Site

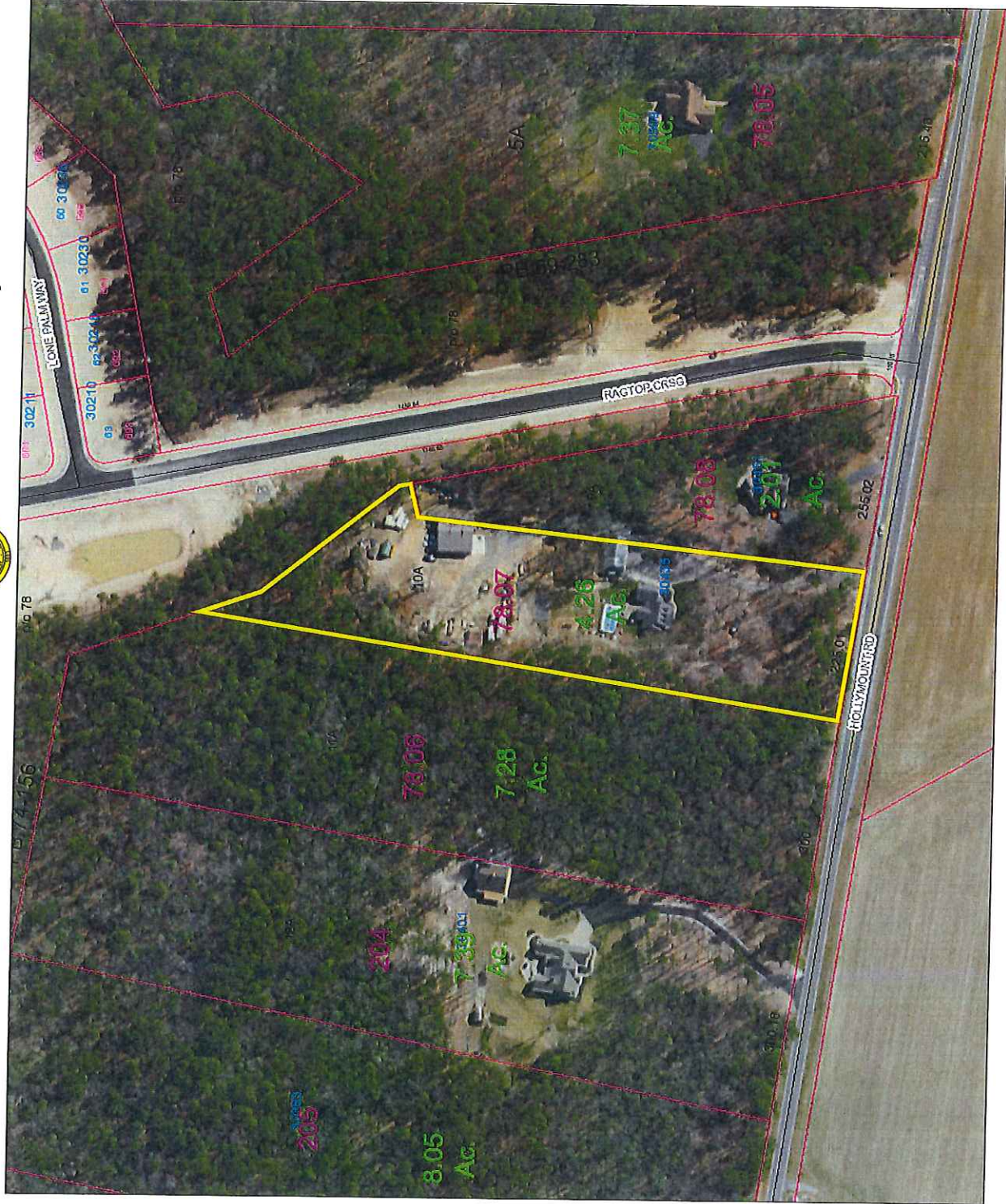
Site Area: 4.26 ac. +/-

Tax Map ID.: 234-11.00-78.07



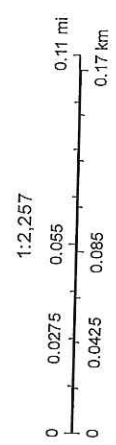


Sussex County



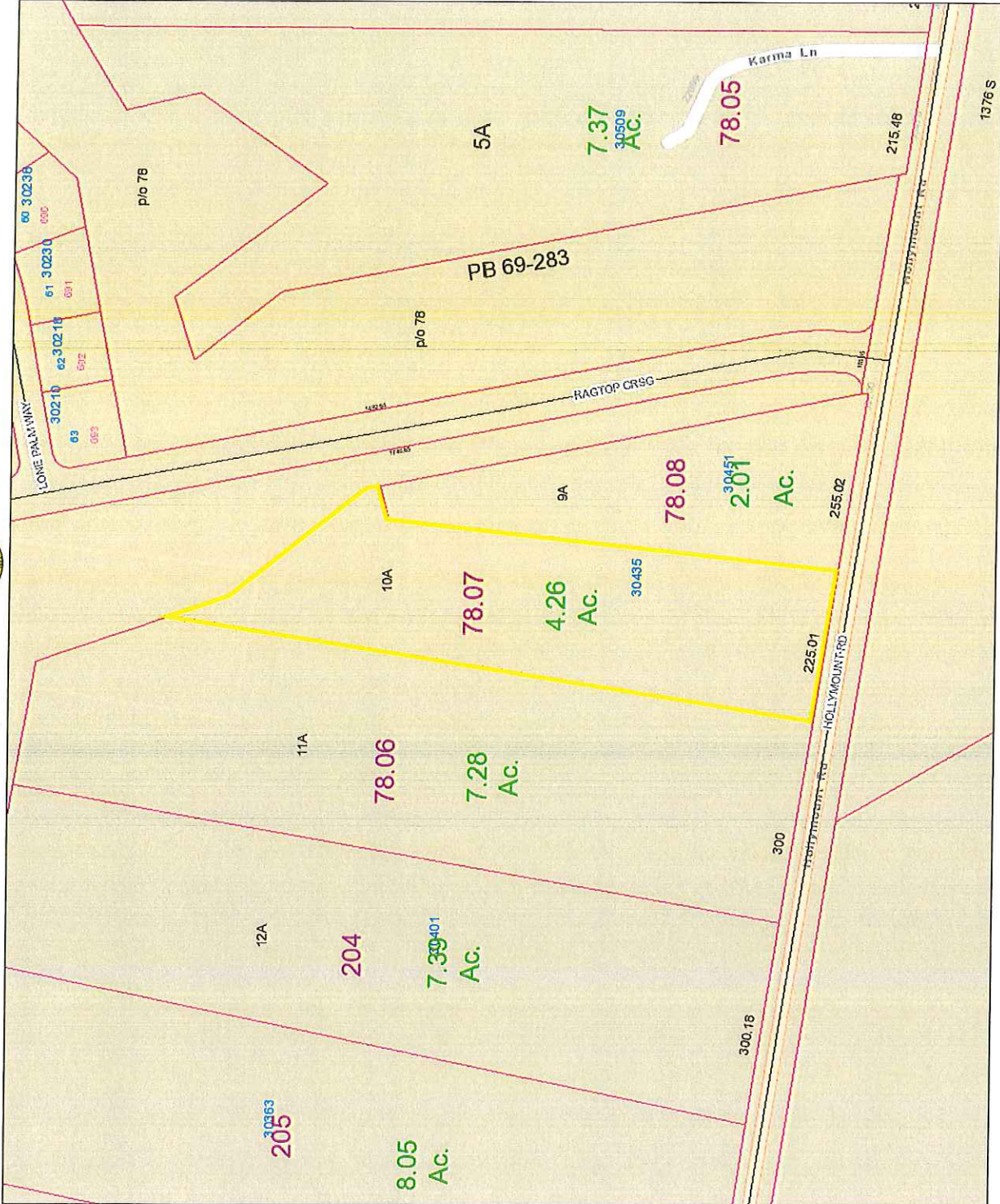
PIN:	234-11.00-78.07
Owner Name	DOUGHERTY GERALD J III
Book	4557
Mailing Address	30435 HOLLYMOUNT RD
City	HARBESON
State	DE
Description	N/RT 48
Description 2	TRACT 10A
Description 3	N/A
Land Code	

- polygonLayer
- Override 1
- polygonLayer
- Override 1
- Tax Parcels
- 911 Address
- Streets



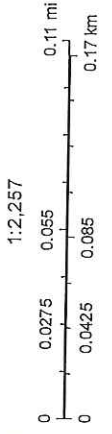


Sussex County



PIN:	234-11 00-78.07
Owner Name	DOUGHERTY GERALD J III
Book	4557
Mailing Address	30435 HOLLYMOUNT RD
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Description 3	N/A
Land Code	

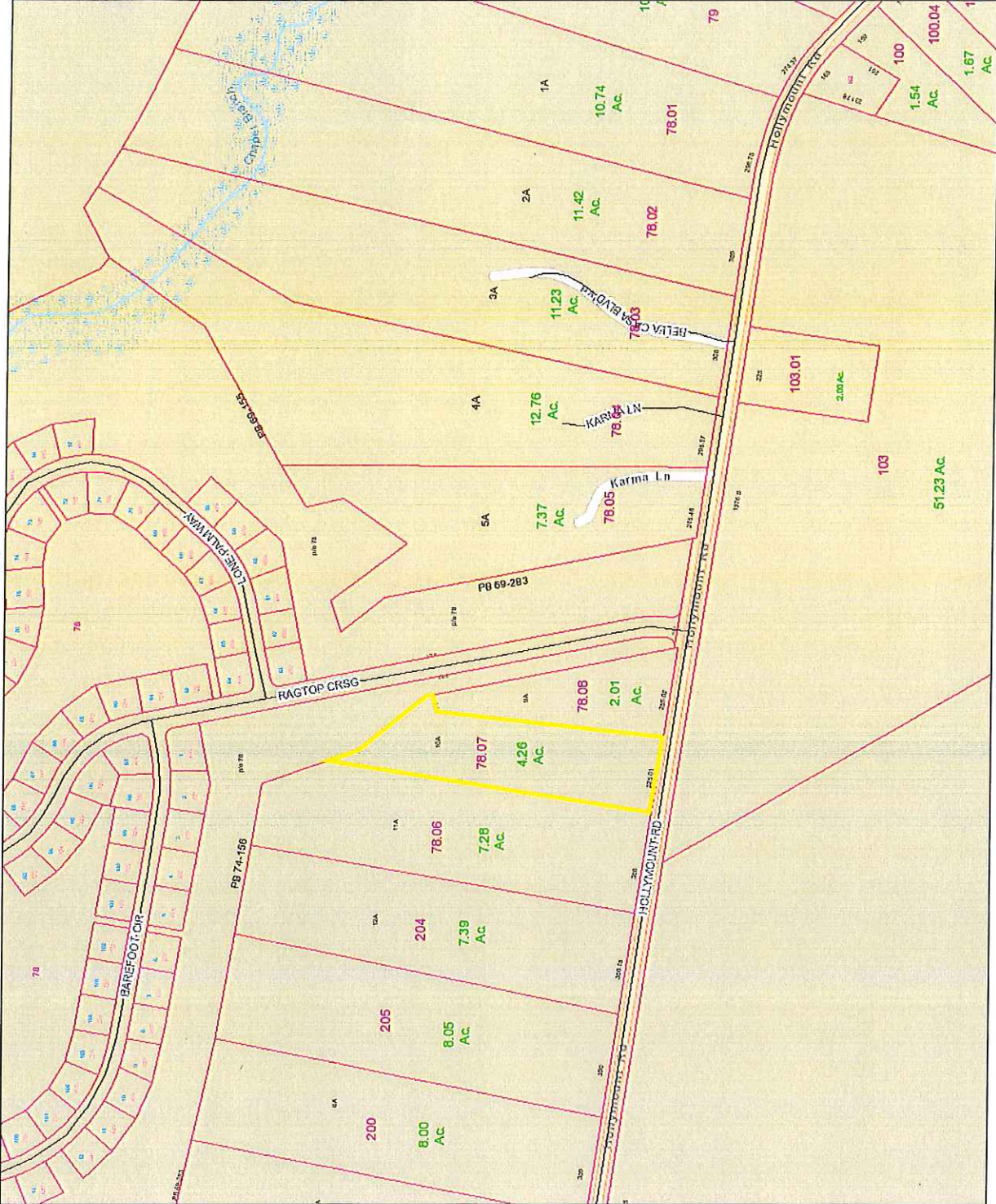
- polygonLayer
Override 1
- polygonLayer
Override 1
- Tax Parcels
- 911 Address
- Streets



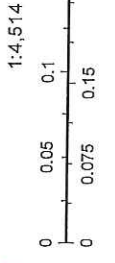


Sussex County

PIN:	234-11.00-78.07
Owner Name	DOUGHERTY GERALD J III
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Description	N/RT 48
Description 2	TRACT 10A
Description 3	N/A
Land Code	



- polyonLayer Override 1
- polyonLayer Override 1
- Tax Parcels
- 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
 - General Commercial - C-1
 - Commercial Residential - CR-1
 - Maine - M
 - Limited Industrial - LI-1
 - Limited Industrial - LI-2
 - Heavy Industrial - HI-1



PLANNING & ZONING

JANELLE M. CORNWELL, AICP
DIRECTOR

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



Sussex County

DELAWARE
sussexcountyde.gov

Memorandum

To: Sussex County Planning Commission Members
From: Janelle Cornwell, AICP, Planning & Zoning Director
CC: Vince Robertson, Assistant County Attorney and applicant
Date: January 17, 2019
RE: Staff Analysis for CU 2157 Country Lawn Care & Maintenance, LLC

This memo is to provide background and analysis for the Planning Commission to consider as a part of application CU 2157 Country Lawn Care & Maintenance, LLC to be reviewed during the January 24, 2019 Planning Commission Meeting. This analysis should be included in the record of this application and is subject to comments and information that may be presented during the public hearing.

The request is for a Conditional Use for parcel 234-11.00-78.07 to allow for a landscaping business to be located at 30435 Hollymount Rd. The size of the properties is 4.26 ac. +/-.

The 2008 Sussex County Comprehensive Plan Update (Comprehensive Plan) provides a framework of how land is to be developed. As part of the Comprehensive Plan a Future Land Use Map is included to help determine how land should be zoned to ensure responsible development. The Future Land Use map indicates that the properties have the land use designation of Low Density Areas.

The surrounding land uses to the north, south, east and west are Low Density Areas. The Low Density Areas land use designation recognizes that the primary uses are agriculture and single family detached homes and that a business development should be largely confined to businesses that address the needs of single family residences and agriculture. It should also permit industrial uses that support or depend on agricultural uses. The focus of retail and office should provide convenience goods and services to nearby residents and should be limited in their location, size and hours of operation. The use as auto repair and gasoline sales, should be avoided in these areas.

The property is zoned AR-1 (Agricultural Residential District). The properties to the north, south, east and west are zoned AR-1 (Agricultural Residential District). There are no known Conditional Uses in the area.

Based on the analysis of the land use, surrounding zoning and uses, the Conditional Use for a landscaping business could be considered consistent with the land use, area zoning and uses.





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

JENNIFER COHAN
SECRETARY

July 5, 2018

Ms. Janelle Cornwell, Director
Sussex County Planning & Zoning
P.O. Box 417
Georgetown, DE 19947

Dear Ms. Cornwell:

The Department has completed its review of a Service Level Evaluation Request for the **Gerald J. Dougherty, III & Stephania Maria Dougherty** conditional use application, which we received on June 11, 2018. This application is for a 4.26-acre parcel (Tax Parcel: 234-11.00-78.07). The subject land is located on the north side of Hollymount Road (Sussex Road 48), approximately 2,260 feet east of the intersection of Hollymount Road and Beaver Dam Road (Sussex Road 285). The subject land is currently zoned AR-1 (Agricultural Residential), and the applicant is seeking a conditional use approval to utilize the facility to operate an existing landscaping business known as County Lawn Care & Maintenance, LLC.

Per the 2017 Delaware Vehicle Volume Summary, the annual average and summer average daily traffic volumes along the segment of Hollymount Road where the subject land is located, which is from Delaware Route 5 to Delaware Route 24, are 2,331 and 2,988 vehicles per day, respectively.

Based on our review, we estimate that the above land uses will generate fewer than 50 vehicle trips in any hour and fewer than 500 vehicle trips per day. These numbers of trips are DelDOT's minimum warrants for determining that a Traffic Impact Study (TIS) should be required for a particular development. Because the proposed land use would not meet these warrants, we consider the development's traffic impact to be negligible in the context of our agreement with the County regarding land development coordination and we do not recommend that the applicant be required to perform a TIS for the subject application. DelDOT's description of this application as negligible with regard to warranting a TIS does not mean that it is negligible in other respects. We recommend that the applicant not be required to perform a TIS for the subject application.



Ms. Janelle M. Cornwell
Page 2 of 2
July 5, 2018

Please contact Mr. Claudy Joinville, at (302) 760-2124, if you have questions concerning this correspondence.

Sincerely,



T. William Brockenbrough, Jr.
County Coordinator
Development Coordination

TWB:cjm

cc: Constance C. Holland, Coordinator, Cabinet Committee on State Planning Issues
Gerald J. Dougherty, III & Stephania Maria Dougherty, Applicant
J. Marc Coté, Assistant Director, Development Coordination
Gemez Norwood, South District Public Works Manager, Maintenance and Operations
Steven Sisson, Sussex County Subdivision Coordinator, Development Coordination
Derek Sapp, Subdivision Manager, Development Coordination
Brian Yates, Subdivision Manager, Development Coordination
Susanne Laws, Subdivision Manager, Development Coordination
Troy Brestel, Project Engineer, Development Coordination
Claudy Joinville, Project Engineer, Development Coordination

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

TO: **Janelle Cornwell** RECEIVED

REVIEWER: **Chris Calio** JAN 07 2019 RECEIVED

DATE: **1/4/2019** SUSSEX COUNTY PLANNING & ZONING JAN 04

APPLICATION: **CU 2157 Country Lawn Care & Maintenance, LLC** SUSSEX COUNTY PLANNING & ZONING

APPLICANT: **Country Lawn Care & Maintenance, LLC**

FILE NO: **NCPA-5.03**

TAX MAP & PARCEL(S): **234-11.00-78.07**

LOCATION: **North side of Hollymount Road, approximately 0.42 miles east of Beaver Dam Road.**

NO. OF UNITS: **Landscaping business**

GROSS ACREAGE: **4.26**

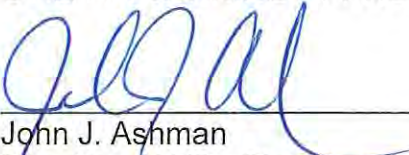
SYSTEM DESIGN ASSUMPTION, MAXIMUM NO. OF UNITS/ACRE: **2**

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 **\$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 Conditional Use is not in an area where the Sussex County Engineering Department has a plan or 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.
Jayne Dickerson
No Permit Tech Assigned

WRITTEN SUBMISSION
OF
COUNTRY LAWN CARE & MAINTENANCE, LLC
C/U NO. 2157
January 24, 2019

Shannon Carmean Burton, Esquire
Sergovic Carmean Weidman
McCartney & Owens, P.A.
406 S. Bedford St., Suite 1
P.O. Box 751
Georgetown, DE 19947
(302) 855-1260

INDEX
COUNTRY LAWN CARE & MAINTENANCE, LLC
APPLICATION FOR CONDITIONAL USE NO. 2157
FOR AN EXISTING LANDSCAPING BUSINESS

1. Copy of the Application without exhibits
2. Deed of the lands seeking a conditional use
3. Conditional Use Site Plan prepared by Pennoni Associates Inc.
4. DelDOT Response Letter to Service Level Evaluation Request dated July 5, 2018
5. Letters in Support of Application
6. Google Earth Image of Property
7. Photographs of the Property
8. Photographs of the Property from Spring Breeze Subdivision
9. Sussex County Zoning Map
10. 2017 Orthophoto of the Property
11. LiDAR Elevation Map
12. Statement of Sergovic Carmean Weidman McCartney & Owens, P.A. explaining the Application and its compliance with the Zoning Code and the Comprehensive Plan Update, June 2008
13. Proposed Findings of Fact and Conditions

Exhibit “1”

File #: _____

Planning & Zoning Commission 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 18 2018

SUSSEX COUNTY
PLANNING & ZONING

Type of Application: (please check applicable)

Conditional Use

Zoning Map Amendment

Site Address of Conditional Use/Zoning Map Amendment

30435 Hollymount Road, Harbeson, Delaware 19951

Type of Conditional Use Requested:

Applicant requests a conditional use of land for purposes of operating an existing landscaping business known as Country Lawn Care & Maintenance, LLC on the property.

Tax Map #: 2-34 11.00 78.07

Size of Parcel(s): 4.26 +/- acres

1. Proposed 2,014 sq. ft. addition of existing building; 2. proposed 1,333 sq. ft. addition of existing building; and 3. existing dwelling to remain unchanged.

Current Zoning: AR-1

Proposed Zoning: AR-1/CU

Size of Building:

Land Use Classification: Low Density Area

Water Provider: N/A - existing private on-site well

Sewer Provider: N/A - existing private on-site septic system

Applicant Information

Applicant Name: Country Lawn Care & Maintenance, LLC

Applicant Address: 30435 Hollymount Road

City: Harbeson

State: DE

Zip Code: 19951

Phone #: (302) 841-1723

E-mail: Ap.clclawns@gmail.com

Owner Information

Owner Name: Gerald J. Dougherty, III and Stephania Maria Dougherty

Owner Address: 30435 Hollymount Road

City: Harbeson

State: DE

Zip Code: 19951

Phone #: (302) 841-1723

E-mail: Ap.clclawns@gmail.com

Agent/Attorney/Engineer Information

Agent/Attorney/Engineer Name: Shannon Carmean Burton, Esquire

Agent/Attorney/Engineer Address: Sergovic Carmean Weidman McCartney & Owens, P.A., 406 S. Bedford Street, Suite 1

City: Georgetown

State: DE

Zip Code: 19947

Phone #: (302) 855-1260

E-mail: shannonb@sussexattorney.com



Check List for Sussex County Planning & Zoning Applications

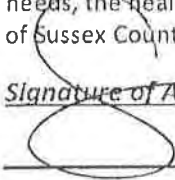
The following shall be submitted with the application

- Completed Application
- Provide eight (8) copies of the Site Plan or Survey of the property
 - o Survey shall show the location of existing or proposed building(s), building setbacks, parking area, proposed entrance location, etc.
 - o Provide a PDF of Plans (may be e-mailed to a staff member)
 - o Deed or Legal description
- Provide Fee \$500.00
- Optional - Additional information for the Commission/Council to consider (ex. architectural elevations, photos, exhibit books, etc.) If provided submit 8 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.
- DeIDOT Service Level Evaluation Request Response
- PLUS Response Letter (If required)

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.

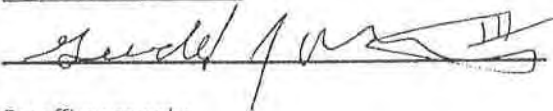
I also certify that I or an agent on my behalf shall attend all public hearing before the Planning and Zoning Commission and the Sussex County Council and any other hearing necessary for this application and that I will answer any questions to the best of my ability to respond to the present and future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

Signature of Applicant/Agent/Attorney



Date: 9/18/18

Signature of Owner



Date: 9-18-18

For office use only:

Date Submitted: _____
Staff accepting application: _____
Location of property: _____

Fee: \$500.00 Check #: _____
Application & Case #: _____

Subdivision: _____
Date of PC Hearing: _____ Recommendation of PC Commission: _____
Date of CC Hearing: _____ Decision of CC: _____

Exhibit “2”

20118

BK: 4557 PG: 40

Parcel #2-34-11.00-78.07
Prepared by & Return to:
Schab & Barnett, P.A.
9 Chestnut Street
Georgetown, DE 19947
File No. 160141CM

THIS DEED is made this 16th day of June, 2016, between:

Jeffrey C. Bateson and Marion G. Bateson, of 30435 Hollymount Road, Harbeson, DE 19951, parties of the first part,

and

Gerald J. Dougherty III and Stephania Maria Dougherty, of 30435 Hollymount Road, Harbeson, DE 19951, parties of the second part, as tenants by the entirety.

WITNESSETH: That the parties of the first part, for and in consideration of the sum of Four Hundred Sixty Thousand and 00/100 Dollars (\$460,000.00), lawful money of the United States of America, the receipt whereof is hereby acknowledged, hereby grant and convey unto the parties of the second part, the following described lands, situate, lying and being in Sussex County, State of Delaware;

ALL that certain tract, piece or parcel of land, lying and being in Indian River Hundred, Sussex County, Delaware, and being known and designated as Tract 10A, as shown on a plot prepared for Spring Breeze L.L.C., by Adams-Kemp Associates, Inc., P.L.S., dated February 20, 2001, and of record in the Office of the Recorder of Deeds, in and for Sussex County, at Georgetown, Delaware, in Plot Book 74, Page 157, together with any and all improvements located thereon.

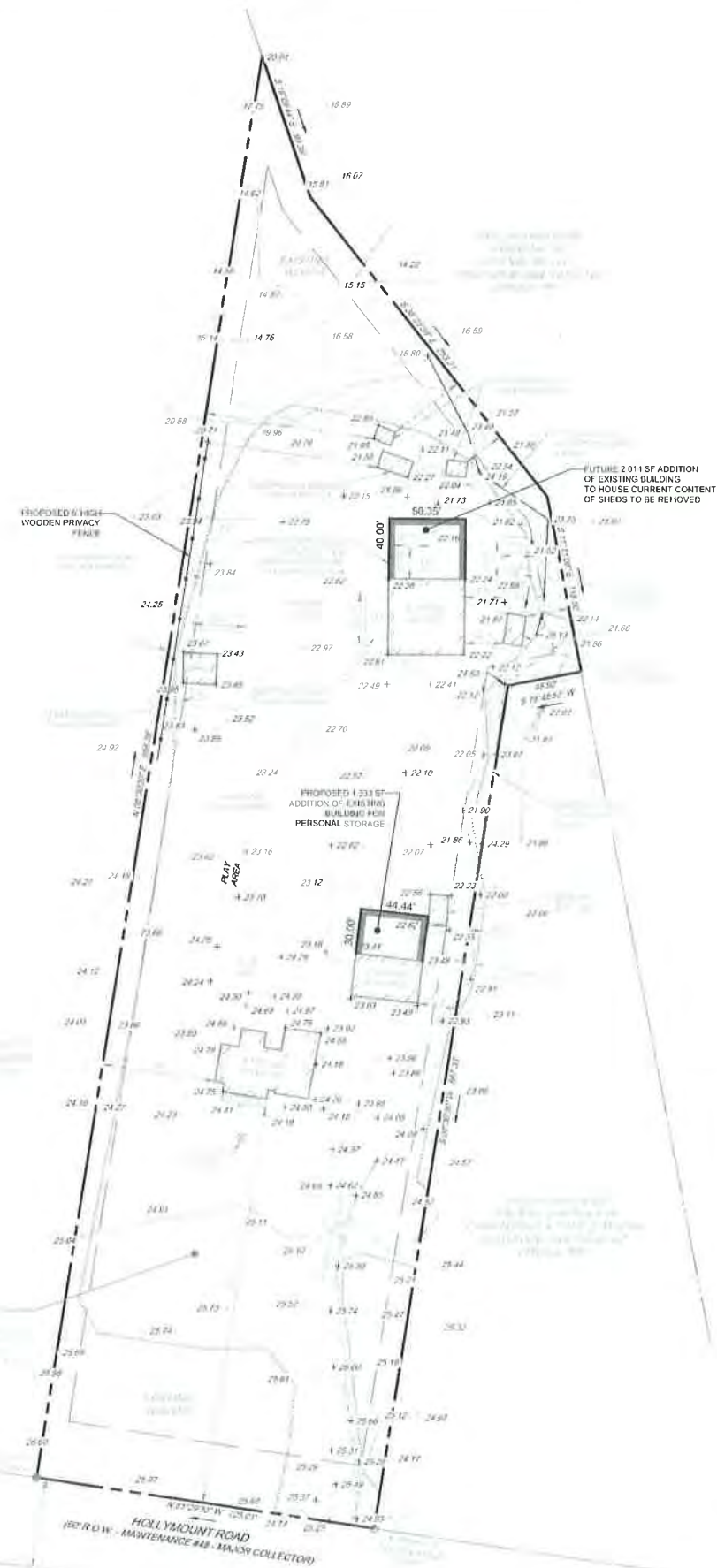
SUBJECT to any and all restrictions, reservations, conditions, easements and agreements of record in the Office of the Recorder of Deeds in and for Sussex County, Delaware.

BEING the same land conveyed unto Jeffrey C. Bateson and Marion G. Bateson, by Deed of Marion Hurlock n/k/a Marion G. Bateson, dated April 19, 2004, and recorded April 1, 2004, in the Office of the Recorder of Deeds, in and for Sussex County, Delaware in Deed Book 9641, Page 34.

MT

MS

Exhibit “3”



SITE DATA:

- 1 TAX MAP NUMBER 234-11 00-78 07
2 DEVELOPER NAME GERALD & STEPHANIA DOUGHERTY
3 DEVELOPER ADDRESS 30435 HOLLYMOUNT ROAD HARBESON DE 19951
4 SITE ADDRESS 30435 HOLLYMOUNT ROAD HARBESON DE 19951
5 CURRENT ZONING AR-1 (AGRICULTURAL-RESIDENTIAL)
6 PROPOSED ZONING AR-1 (AGRICULTURAL-RESIDENTIAL)
7 PRESENT USE RESIDENTIAL LAWN CARE & MAINTENANCE
8 PROPOSED USE RESIDENTIAL LAWN CARE & MAINTENANCE
9 REQUIRED SETBACKS FRONT - 40 FEET SIDE - 15 FEET REAR - 20 FEET
10 BUILDING HEIGHT 42 ALLOWED
11 PARKING (ARTICLE XXII OFF-STREET PARKING CODE SECTION 115-162) NO SPECIFIC USE IDENTIFIED PROVIDED SPACES 10 SPACES (EMPLOYEES) 8 SPACES (TRUCK & TRAILER)
12 WATER SUPPLY EXISTING PRIVATE ON-SITE WELL WATER IS SUBJECT TO THE APPROVAL OF THE DELAWARE STATE DEPARTMENTS OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL AND THE DELAWARE DIVISION OF PUBLIC HEALTH
13 SEWER SUPPLY EXISTING PRIVATE ON-SITE SEPTIC
14 LATITUDE AND LONGITUDE STATE PLAIN COORDINATES LONGITUDE W075° 46' 12.85" LATITUDE N033° 40' 28.25"
15 TOTAL AREA (GROSS) 4.26± ACRES MINIMUM LOT AREA 32,670 SF MINIMUM LOT WIDTH 180 FT MINIMUM LOT DEPTH 100 FT
16 NET DEVELOPMENT AREA 4.26± AC
17 WETLAND AREA 0.00± AC (DNREC NAVMAP)
18 PROPOSED DISCHARGE LOCATION HERRING CREEK WATERSHED VIA TRIBUTARY OF CHAPEL BRANCH
19 LIMIT OF DISTURBANCE 4.26± AC
20 SITE CALCULATIONS BUILDING AREA EX = 0.18 AC PR = 0.23 AC GRASS AREA EX = 1.84 AC PR = 1.76 AC PAVEMENT/STONE AREA EX = 1.01 AC PR = 1.01 AC WOODED AREA EX = 1.23 AC PR = 1.23 AC TOTAL EX = 4.26 AC PR = 4.26 AC
21 ROAD NAME - SCR 48 | HOLLYMOUNT ROAD
22 FUNCTIONAL CLASSIFICATION - MAJOR COLLECTOR
23 AADT = 2151 (2018)
24 SPEED LIMIT = 50 MPH
25 EXISTING RESIDENTIAL COMMERCIAL ENTRANCE
26 PROXIMITY TO TRANSPORTATION DISTRICTS NONE KNOWN

SITE INFORMATION:

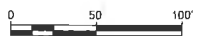
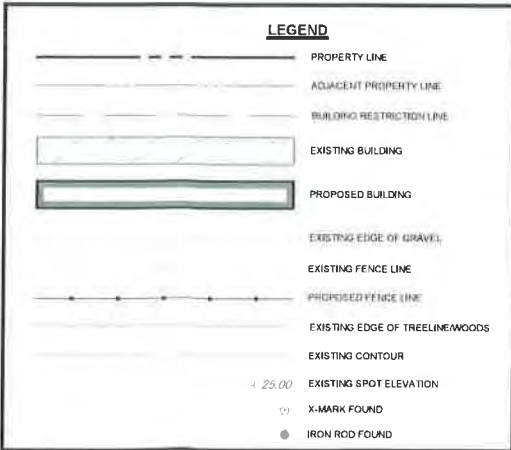
SITE ADDRESS 30435 HOLLYMOUNT ROAD HARBESON DE 19951
OWNER/DEVELOPER COUNTRY LAWN CARE & MAINTENANCE, LLC GERALD & STEPHANIA DOUGHERTY 30435 HOLLYMOUNT ROAD HARBESON DE 19951
ENGINEER PENNONI ASSOCIATES, INC 18072 DAVIDSON DRIVE MILTON, DE 19968



VICINITY MAP SCALE: 1" = 2000'

NOTES:

- 1 THE BOUNDARY INFORMATION SHOWN ON THIS PLAN WAS TAKEN FROM DOCUMENTS OF PUBLIC RECORD AND IS THE RESULT OF AN ACTUAL FIELD SURVEY BY PENNONI ASSOCIATES INC PERFORMED ON AUGUST 14 2018
2 THE TOTAL AREA FOR THE SUBJECT PROPERTY IS 4.26 ACRES±
3 THIS SURVEY DOES NOT VERIFY THE LOCATION AND/OR EXISTENCE OF EASEMENTS OR RIGHTS-OF-WAY CROSSING SUBJECT PROPERTY AS NO TITLE SEARCH WAS REQUESTED OR PROVIDED.
4 THIS PROPERTY APPEARS ON SUSSEX COUNTY TAX MAP 234-11 00 AS PARCEL 78 07 AND IS CURRENTLY ZONED AR-1 (AGRICULTURAL RESIDENTIAL)
5 CLASS OF SURVEY SUBURBAN
6 DEED REFERENCE DEED BOOK 4557 PAGE 40 PLAT REFERENCE PLAT BOOK 74 PAGE 157
7 PROPERTY BOUNDARY BEARING SYSTEM IS BASED ON DELAWARE STATE PLANE COORDINATE SYSTEM HORIZONTAL DATUM NAD83
8 THE PROPERTY IS LOCATED IN ZONE "X" UNSHADED ON THE FEMA FLOOD INSURANCE RATE MAP NUMBER 10050C0340K LAST REVISED 3/16/15 ZONE "X" UNSHADED IS DETERMINED TO BE OUTSIDE THE 500 YEAR FLOODPLAIN
9 THERE ARE NO WETLANDS ON THE PROPERTY ACCORDING TO THE DNREC ENVIRONMENTAL NAVIGATOR WEBSITE
10 THE PROPERTY IS ZONED AR-1 (AGRICULTURAL-RESIDENTIAL DISTRICT)
11 BUILDING SETBACKS (CH 115-25C) FRONT-40 SIDE - 15' REAR - 20'
12 THE SUBJECT SITE IS LOCATED IN THE HERRING CREEK WATERSHED. PER DELAWARE DEPARTMENT OF NATURAL RESOURCES & ENVIRONMENTAL CONTROL (DNREC) ENVIRONMENTAL NAVIGATOR WEBSITE, STORMWATER DISCHARGE WILL BE HANDLED VIA EXISTING DISCHARGE TO THE WATERSHED.
13 UNLESS SPECIFICALLY STATED OR SHOWN HEREON TO THE CONTRARY, THIS SURVEY IS MADE SUBJECT TO AND DOES NOT LOCATE OR DELINEATE RIGHTS OR INTEREST OF THE UNITED STATES OF AMERICA OR STATE OF DELAWARE OVER LANDS NOW OR FORMERLY FLOWED BY TIDEWATER, BUT NO LONGER VISIBLE OR PHYSICALLY EVIDENT OR LANDS CONTAINING ANY ANIMAL MARINE OR BOTANICAL SPECIES REGULATED BY OR UNDER THE JURISDICTION OF ANY FEDERAL, STATE, OR LOCAL AGENCY.
14 BUILDING SETBACK LINES, ZONING REGULATIONS OR LINES ESTABLISHED BY ANY FEDERAL, STATE OR LOCAL AGENCY WHICH MAY AFFECT THE BUILDING OR DEVELOPMENT POTENTIAL OF THE SUBJECT PROPERTY.
15 ANY SUBSURFACE OR SUBTERRANEAN CONDITIONS, EASEMENTS OR RIGHTS INCLUDING, BUT NOT LIMITED TO MINERAL OR MINING RIGHTS, OR THE LOCATION OF OR RIGHTS TO ANY SUBSURFACE STRUCTURES, CONTAINERS OR FACILITIES OR ANY OTHER NATURAL OR MAN-MADE SUBSURFACE CONDITION WHICH MAY OR MAY NOT AFFECT THE USE OR DEVELOPMENT POTENTIAL OF THE SUBJECT PROPERTY.
16 NO UNDERGROUND UTILITY MARKING WAS PERFORMED FOR THIS SURVEY.
17 ALL WORK SHALL COMPLY WITH ALL APPLICABLE STATE, FEDERAL, AND LOCAL CODES. ALL NECESSARY LICENSES AND PERMITS SHALL BE OBTAINED BY THE CONTRACTOR AT HIS EXPENSE UNLESS PREVIOUSLY OBTAINED BY OWNER.
18 THE CONTRACTOR SHALL IMMEDIATELY INFORM THE ENGINEER OF ANY DISCREPANCIES OR ERRORS THEY DISCOVER IN THE PLAN.
19 DEVIATION FROM THESE PLANS AND NOTES WITHOUT THE PRIOR CONSENT OF THE OWNER OR HIS REPRESENTATIVE OR THE ENGINEER MAY BE CAUSE FOR THE WORK TO BE REJECTED.
20 ALL MATERIALS SHALL BE NEW AND SHALL BE ASBESTOS AND VERMICULITE FREE
21 DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK TO BE PERFORMED. IT MUST BE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AS AMENDED AND ALL RULES AND REGULATIONS THERE TO APPLICABLE.
22 PRIOR TO CONSTRUCTION, CONTRACTOR TO FIELD LOCATE AND RECORD ANY DAMAGE TO EXISTING PAVING, SIDEWALK, CURB OR STRUCTURES NOT TO BE REMOVED OR REPLACED. ENGINEER TO VERIFY LOCATION AND EXTENT OF DAMAGE.
23 DAMAGE TO EXISTING PAVING, SIDEWALK, CURB OR STRUCTURES NOT TO BE REPLACED OR REMOVED DURING CONSTRUCTION SHALL BE IMMEDIATELY REPORTED TO ENGINEER. CONTRACTOR SHALL REPAIR OR REPLACE ALL DAMAGED WORK WITHOUT CHARGE TO THE OWNER.
24 THE SUBJECT SITE WILL BE CONSTRUCTED AS ONE PHASE
25 BUILDING LIGHTING TO BE PROVIDED WITH BUILDING PLANS
26 ALL SECURITY LIGHTING (IF NECESSARY) SHALL BE DOWNWARD SCREENED SO THAT IT DOES NOT SHINE ON NEIGHBORING PROPERTIES OR ROADWAYS
27 ALL FIRE LANES, EXITS, STANDPIPE AND SPRINKLER CONNECTIONS WILL BE MARKED IN ACCORDANCE WITH STATE FIRE PREVENTION REGULATIONS. BUILDING CONSTRUCTION TO BE METAL WOOD, ONE STORY AND WILL NOT HAVE SPRINKLERS
28 FIRE ALARM REQUIRED - THE FIRE ALARM SIGNALING SYSTEM SHALL BE AUTOMATIC SUPERVISED OFF-SITE, AND SHALL CONSIST OF FULL COVERAGE BY SMOKE DETECTION AND ALARM NOTIFICATION, WHERE SMOKE DETECTION DEVICE WILL NOT FUNCTION BY REASON OF DEVICE LIMITATION, HEAT DETECTION SHALL BE PROVIDED IN THOSE SPECIFIC LOCATIONS FIRE ALARM SIGNALING SYSTEM PLANS AND SPECIFICATIONS SHALL BE SUBMITTED FOR REVIEW
29 LOCK BOX REQUIRED - CONTACT LOCAL FIRE CHIEF FOR ORDERING INFORMATION AND LOCATION OF BOX ON THE BUILDING
30 MISS UTILITY SHALL BE NOTIFIED THREE (3) DAYS PRIOR TO EXCAVATION
31 ALL DISTURBED AREAS WITHIN THE LIMIT OF DISTURBANCE, BUT NOT IN PAVEMENT SHALL BE TOP-SOILED (4" MINIMUM) SEEDED AND MULCHED
32 MAINTENANCE OF THE STREETS WITHIN THE SITE WILL BE THE RESPONSIBILITY OF THE DEVELOPER AND/OR PROPERTY OWNERS WITHIN THE SITE. THE STATE AND COUNTY ASSUME NO RESPONSIBILITY FOR THE FUTURE MAINTENANCE OF THESE STREETS
33 THE HEIGHT, LOCATION AND MATERIAL OF ALL FENCES, WALLS, SCREEN PLANTING AND LANDSCAPING WILL BE SHOWN ON THE FINAL SITE PLAN
34 ANY PROPOSED SIGN DETAILS WILL BE SUBMITTED SEPARATELY



ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

SUSSEX COUNTY TM# 234-11 00-78.07 INDIAN RIVER HUNDRED HARBESON, DELAWARE 19951

CONDITIONAL USE SITE PLAN COUNTRY LAWN CARE & MAINTENANCE, LLC 30435 HOLLYMOUNT ROAD HARBESON, DELAWARE 19951

Table with columns for REVISIONS, NO, DATE, and BY.

OWNER'S AND DEVELOPER'S CERTIFICATION: I HEREBY CERTIFY THAT I AM THE OWNER/DEVELOPER OF THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN. THE PLANS MADE AT MY DIRECTION THAT I ACKNOWLEDGE THE SAME TO BE MY ACT. IT IS MY DESIRE TO HAVE THE PLAN RECORDED AS SHOWN AND IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS.
GERALD DOUGHERTY DATE
STEPHANIA DOUGHERTY DATE
ENGINEER CERTIFICATION: I HEREBY CERTIFY THAT I AM A PROFESSIONAL ENGINEER IN THE STATE OF DELAWARE THAT THE INFORMATION SHOWN HEREON HAS BEEN PREPARED UNDER MY SUPERVISION AND TO MY BEST KNOWLEDGE AND BELIEF REPRESENTS GOOD SURVEYING PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.
ALAN M. DEKATOR, PE (DE PE #17771) (302) 684-8030

PROJECT: CLCMX18001
DATE: 2018-09-07
DRAWING SCALE: 1" = 50'
DRAWN BY: MW
APPROVED BY: AMD
CS1001 SHEET 1 OF 1

Exhibit “4”



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

JENNIFER COHAN
SECRETARY

July 5, 2018

Ms. Janelle Cornwell, Director
Sussex County Planning & Zoning
P.O. Box 417
Georgetown, DE 19947

Dear Ms. Cornwell:

The Department has completed its review of a Service Level Evaluation Request for the **Gerald J. Dougherty, III & Stephania Maria Dougherty** conditional use application, which we received on June 11, 2018. This application is for a 4.26-acre parcel (Tax Parcel: 234-11.00-78.07). The subject land is located on the north side of Hollymount Road (Sussex Road 48), approximately 2,260 feet east of the intersection of Hollymount Road and Beaver Dam Road (Sussex Road 285). The subject land is currently zoned AR-1 (Agricultural Residential), and the applicant is seeking a conditional use approval to utilize the facility to operate an existing landscaping business known as County Lawn Care & Maintenance, LLC.

Per the 2017 Delaware Vehicle Volume Summary, the annual average and summer average daily traffic volumes along the segment of Hollymount Road where the subject land is located, which is from Delaware Route 5 to Delaware Route 24, are 2,331 and 2,988 vehicles per day, respectively.

Based on our review, we estimate that the above land uses will generate fewer than 50 vehicle trips in any hour and fewer than 500 vehicle trips per day. These numbers of trips are DelDOT's minimum warrants for determining that a Traffic Impact Study (TIS) should be required for a particular development. Because the proposed land use would not meet these warrants, we consider the development's traffic impact to be negligible in the context of our agreement with the County regarding land development coordination and we do not recommend that the applicant be required to perform a TIS for the subject application. DelDOT's description of this application as negligible with regard to warranting a TIS does not mean that it is negligible in other respects. We recommend that the applicant not be required to perform a TIS for the subject application.



Ms. Janelle M. Cornwell
Page 2 of 2
July 5, 2018

Please contact Mr. Claudy Joinville, at (302) 760-2124, if you have questions concerning this correspondence.

Sincerely,



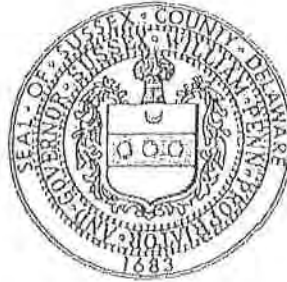
T. William Brockenbrough, Jr.
County Coordinator
Development Coordination

TWB:cjm

cc: Constance C. Holland, Coordinator, Cabinet Committee on State Planning Issues
Gerald J. Dougherty, III & Stephania Maria Dougherty, Applicant
J. Marc Coté, Assistant Director, Development Coordination
Gemez Norwood, South District Public Works Manager, Maintenance and
Operations
Steven Sisson, Sussex County Subdivision Coordinator, Development Coordination
Derek Sapp, Subdivision Manager, Development Coordination
Brian Yates, Subdivision Manager, Development Coordination
Susanne Laws, Subdivision Manager, Development Coordination
Troy Brestel, Project Engineer, Development Coordination
Claudy Joinville, Project Engineer, Development Coordination

PLANNING & ZONING COMMISSION

MARTIN L. ROSS, CHAIRMAN
KIM HOEY STEVENSON, VICE CHAIRMAN
R. KELLER HOPKINS
DOUGLAS B. HUDSON
ROBERT C. WHEATLEY



Sussex County

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

SERVICE LEVEL EVALUATION REQUEST

This form shall be submitted to the Planning and Zoning Office and a response shall be received back from DelDOT prior to the applicant being able to submit an application to the Planning and Zoning Office.

Date: March 16, 2018

Site Information:

Site Address / Location: 30435 Hollymount Road, Harbeson, Delaware 19951

Tax Parcel Number: 2-34 11,00 78.07

Current Zoning: AR-1

Proposed Zoning: AR-1 with Conditional Use

Land Use Classification: Low Density Area

Proposed Use(s): To operate an existing landscaping business known as Country Lawn Care & Maintenance, LLC

Square Footage of any proposed buildings or number of units: No new buildings are proposed

Application Information:

Applicant's Name: Gerald J. Dougherty, III and Stephania Maria Dougherty

Applicant's Address: c/o Sergovic Carmean Weidman McCartney & Owens, P.A.,

406 S. Bedford Street, Suite 1, P.O. Box 751

City: Georgetown State: DE Zip: 19947

Applicant's Phone Number: (302) 855-1260

Applicant's Email: shannonb@sussexattorney.com

RECEIVED

MAR 16 2018

*Made Contest 7/5/2018
3:14 pm*

SUSSEX COUNTY
PLANNING & ZONING

Exhibit “5”

ERNESTO B. LOPEZ
STATE SENATOR
6th District



SENATE
STATE OF DELAWARE
411 LEGISLATIVE AVENUE
DOVER, DELAWARE 19901

COMMITTEES
Environmental,
Natural Resources & Energy
Health, Children
& Social Services
Transportation

January 11, 2019

Commissioner Robert Wheatley
Sussex County Planning & Zoning
2 The Circle
P.O. Box 417
Georgetown, DE 19947

Dear Commissioner Wheatley,

I am writing to you today to offer my support to Gerald Dougherty and his application for conditional use with Sussex County.

Mr. Dougherty and his family have owned their small family business for nearly a decade. For the last few years, Country Lawn Care has been operating, with the support of their neighbors, from their current location on Hollymount Road in Harbeson. Country Lawn Care and the Dougherty Family are committed to their community and have been good neighbors, always giving back.

It is well known that I am champion for small businesses such as Country Lawn Care and for that reason I offer my support Country Lawn Care and their application for conditional use.

With warmest regards and very best wishes as always,

A handwritten signature in black ink that reads "Ernesto B. Lopez".

Dr. Ernesto B. "Ernie" Lopez
Delaware State Senate, 6th District

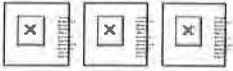
EBL/klr

From: Country lawn Care <countrylawncare@gmail.com>
Sent: Friday, January 11, 2019 1:21 PM
To: Jen Farissier
Subject: Fwd: conditional use

This is a letter of support from one of our neighbors.

Thank You,
Country Lawn Care & Maintenance LLC
302-593-3393
countrylawncare@gmail.com
www.clclawns.com
C3:23

Find us on:



----- Forwarded message -----

From: John Novosel <johnlindanovosel@aol.com>
Date: Fri, Jan 11, 2019 at 11:24 AM
Subject: Re: conditional use
To: Country lawn Care <countrylawncare@gmail.com>

To: Janelle Cornwell, Sussex County Planning and Zoning

We are John and Linda Novosel and reside at 30363 Hollymount Rd, three driveways west of Gerald and Stephanie Dougherty. We have owned our property for just over one year. During that time, we have gotten to know Mr. and Mrs. Dougherty on a casual basis. We were aware of their lawn care business prior to purchasing our new home. Prior to the purchase, we would park our car down the street to observe the amount of traffic generated by their business, as well as our immediate next door neighbor who owns a large lawn cutting service. We can report that neither business generated more than a few trucks early in the morning going to work, and again late in the afternoon at the end of the workday. We went ahead with our purchase and have never regretted that decision because of objectionable traffic.

As an aside, the real issue of traffic has come from the Spring Breeze Ryan Homes development next door to the Dougherty's property where dozens of eighteen wheel trucks have been hauling dirt and debris six days a week for the past year, as well as delivering construction material for dozens of subcontractors. It is our understanding that Spring Breeze will eventually become a 300 home development. In addition, at Hollymount Road and Route 24, Schell Brothers will soon start their new development of 450+ homes. If Sussex County is concerned about traffic on Hollymount Road, perhaps more attention should have been given to the upcoming 700+ homes that we will have to deal with. Sussex County should encourage the kind of home-grown entrepreneurship that Country Lawn Care represents and not rely solely on outlet malls and national builders for continued growth in our county.

Thank you for allowing us to give our input to conditional use application by Mr. And Mrs. Dougherty.

John and Linda Novosel 302-947-2999.

Christopher & Pamela Moore

30451 HollyMount Road

January 11, 2019

Sussex County Planning and Zoning

Attn: Janelle Cornwell, AICP, Planning and Zoning Director

2 The Circle

Georgetown DE 1947

RE: Gerald & Stephania Dougherty

30435 HollyMount Road Harbeson DE 19951

Conditional Use Application

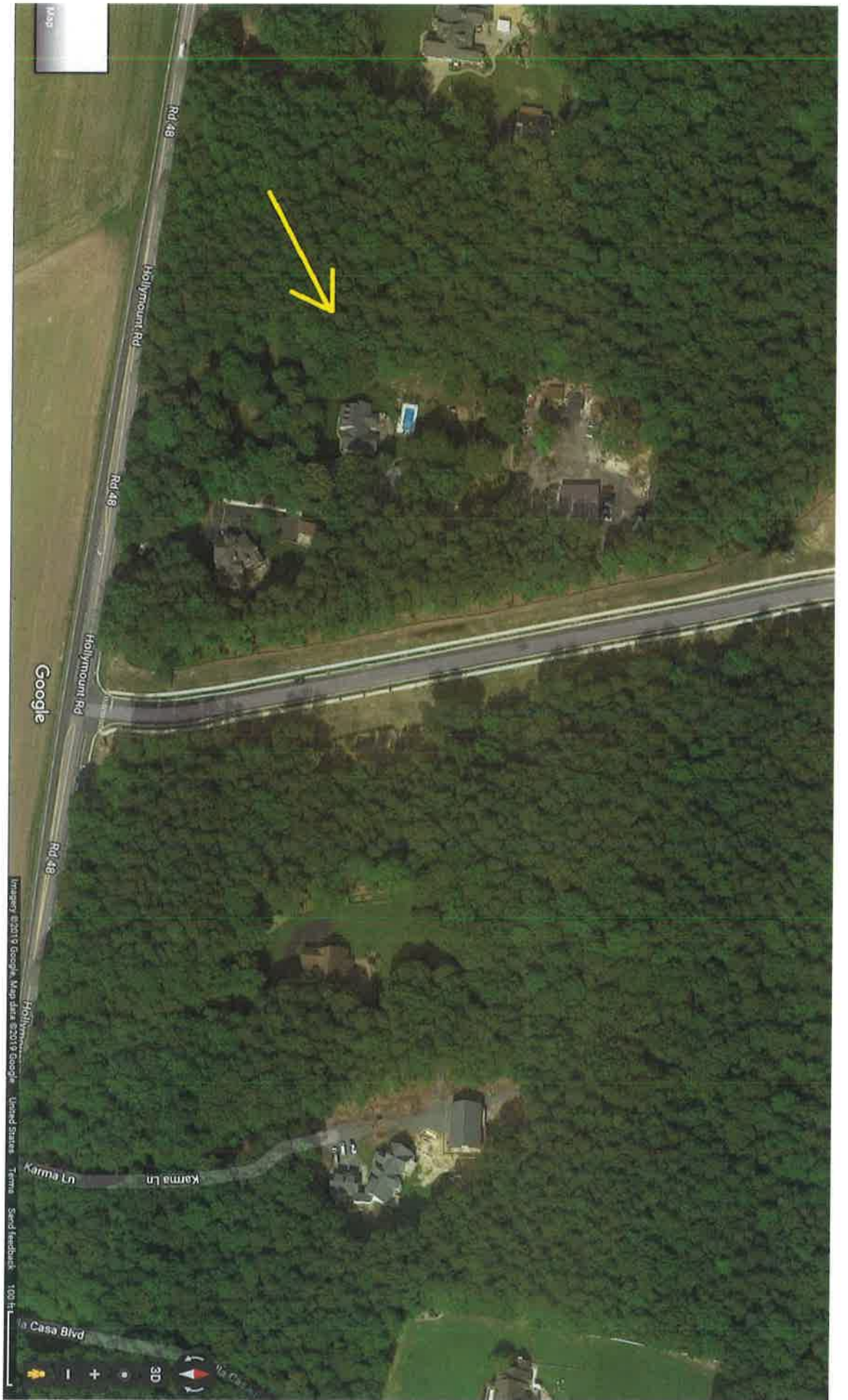
Dear Ms Cornwell:

We own property located at 30451 HollyMount Road, Harbeson Delaware, which property is in close proximity to the above-referenced property owned by Jerry and Stephania Dougherty. We are writing to advise that we support the Dougherty's request for a conditional use of land to allow the Dougherty's to operate their business known as Country Lawn Care & Maintenance on their property.

Sincerely,

A handwritten signature in cursive, appearing to be 'CEM', written over a horizontal line.

Exhibit “6”



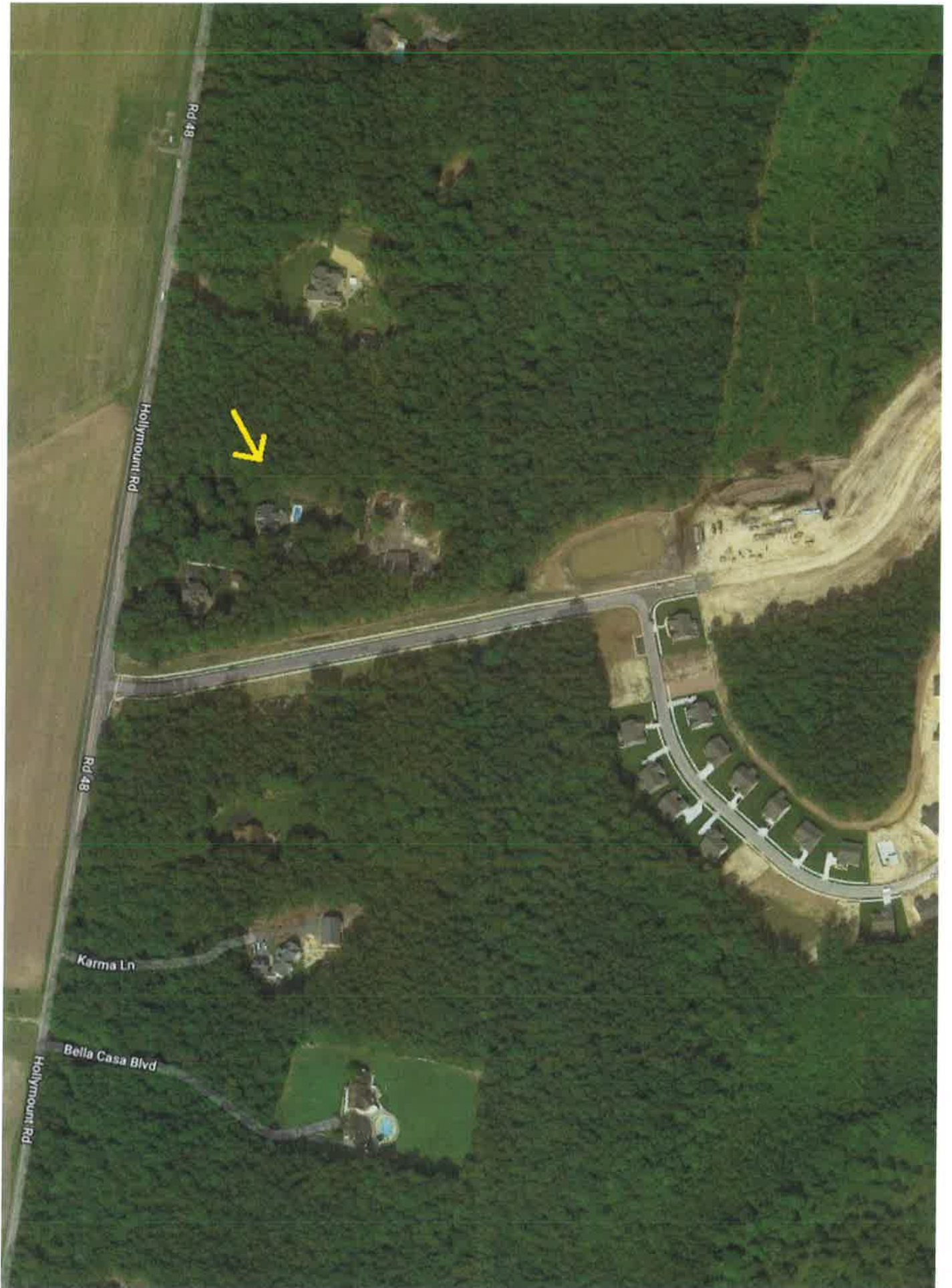


Exhibit “7”

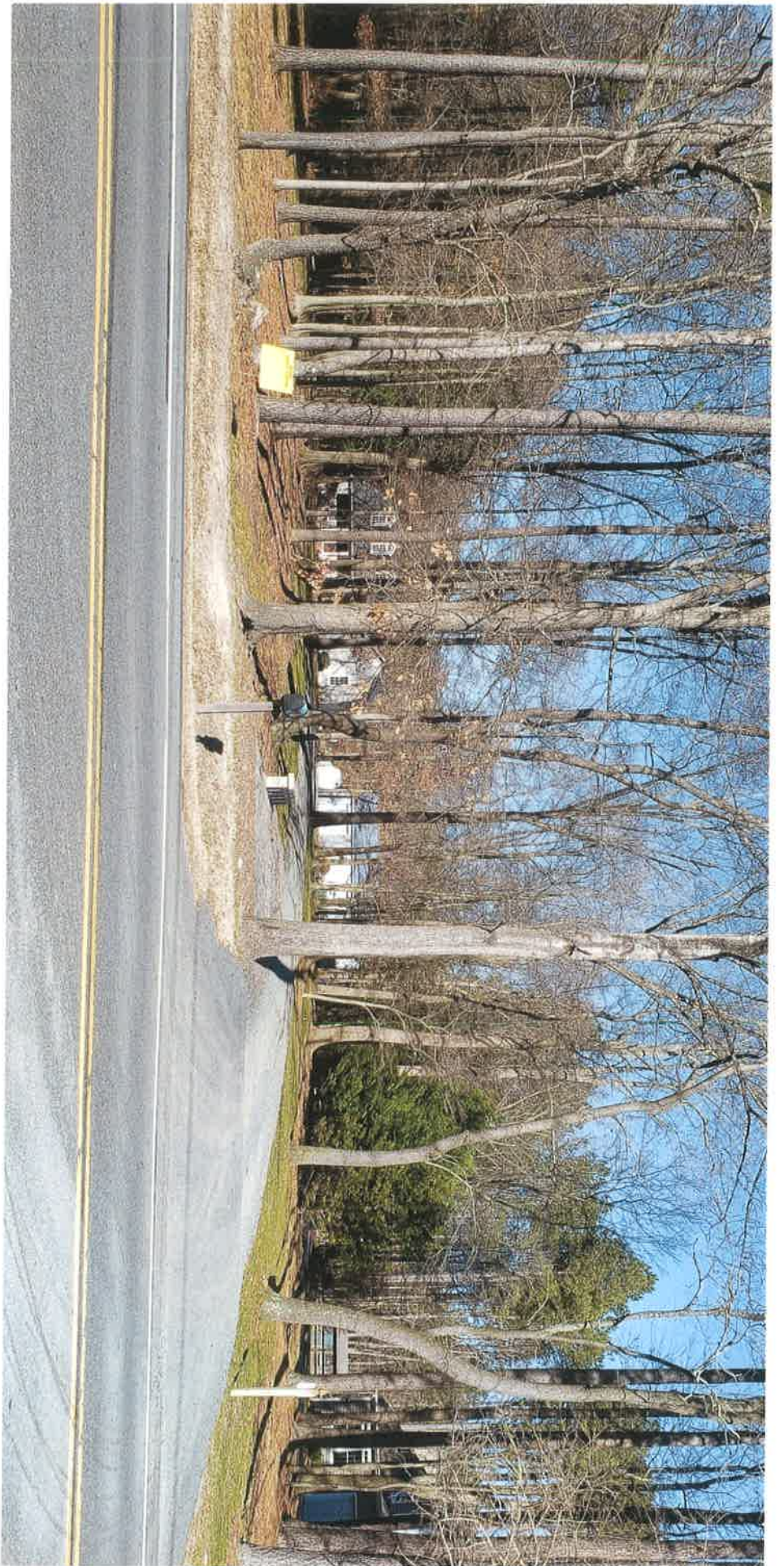




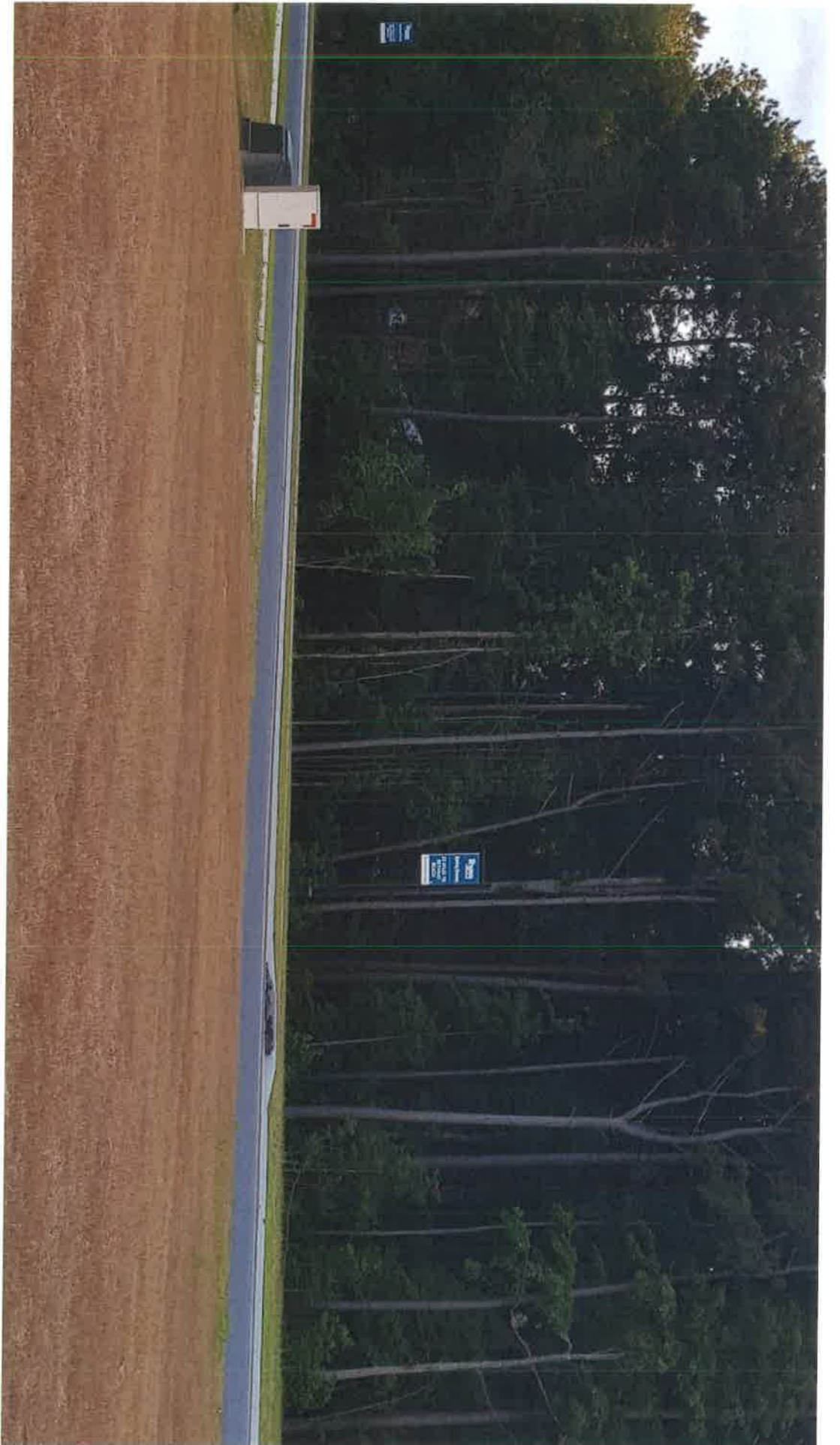








Exhibit “8”



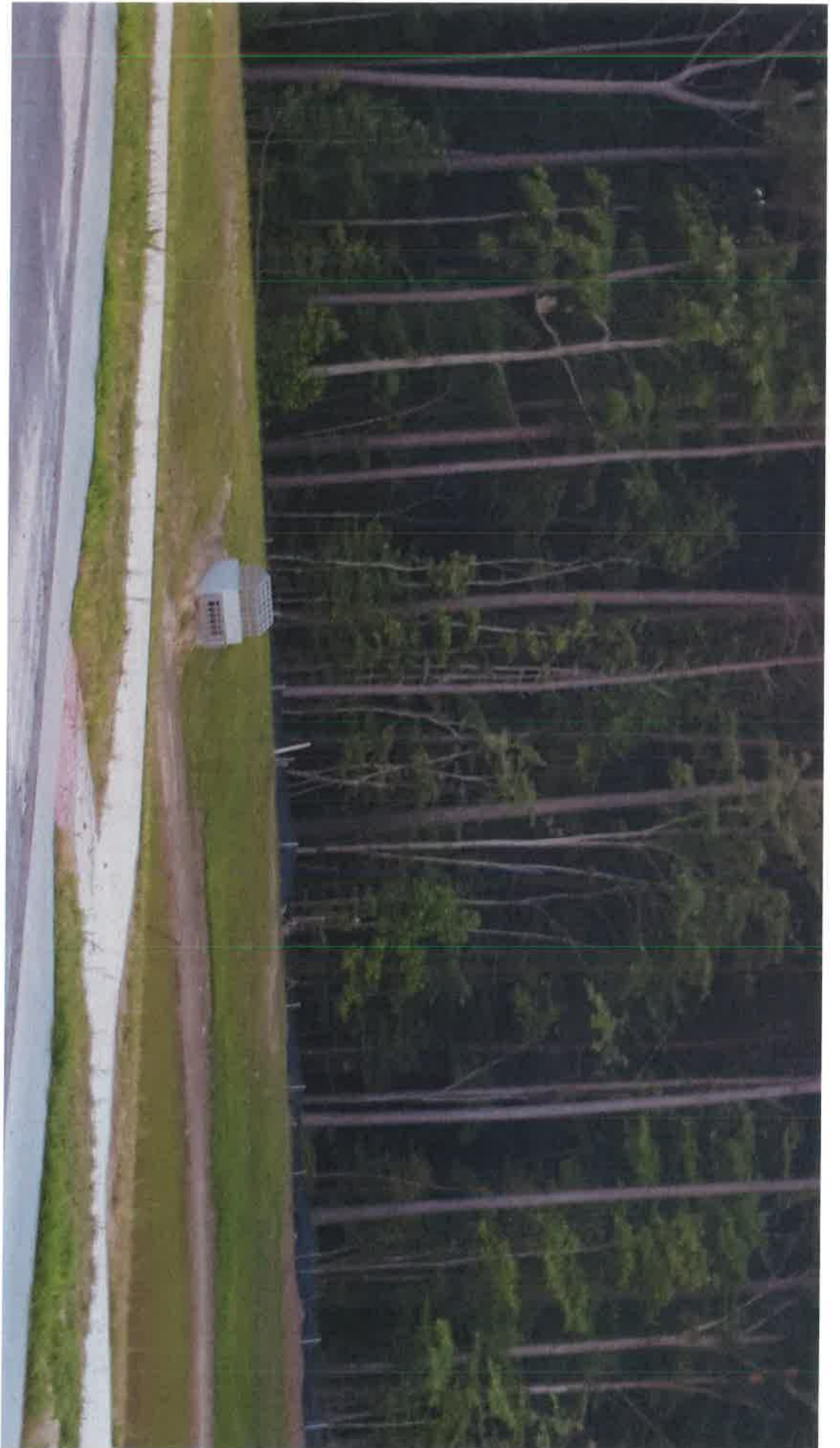








Exhibit “9”



County Zoning Map

Country Lawn Care

CLCMX18001



County Zoning

Agricultural Residential (Unshaded)

Medium Residential

Exhibit “10”



Surdex Corp

2017 Orthophoto

Country Lawn Care

CLCMX18001





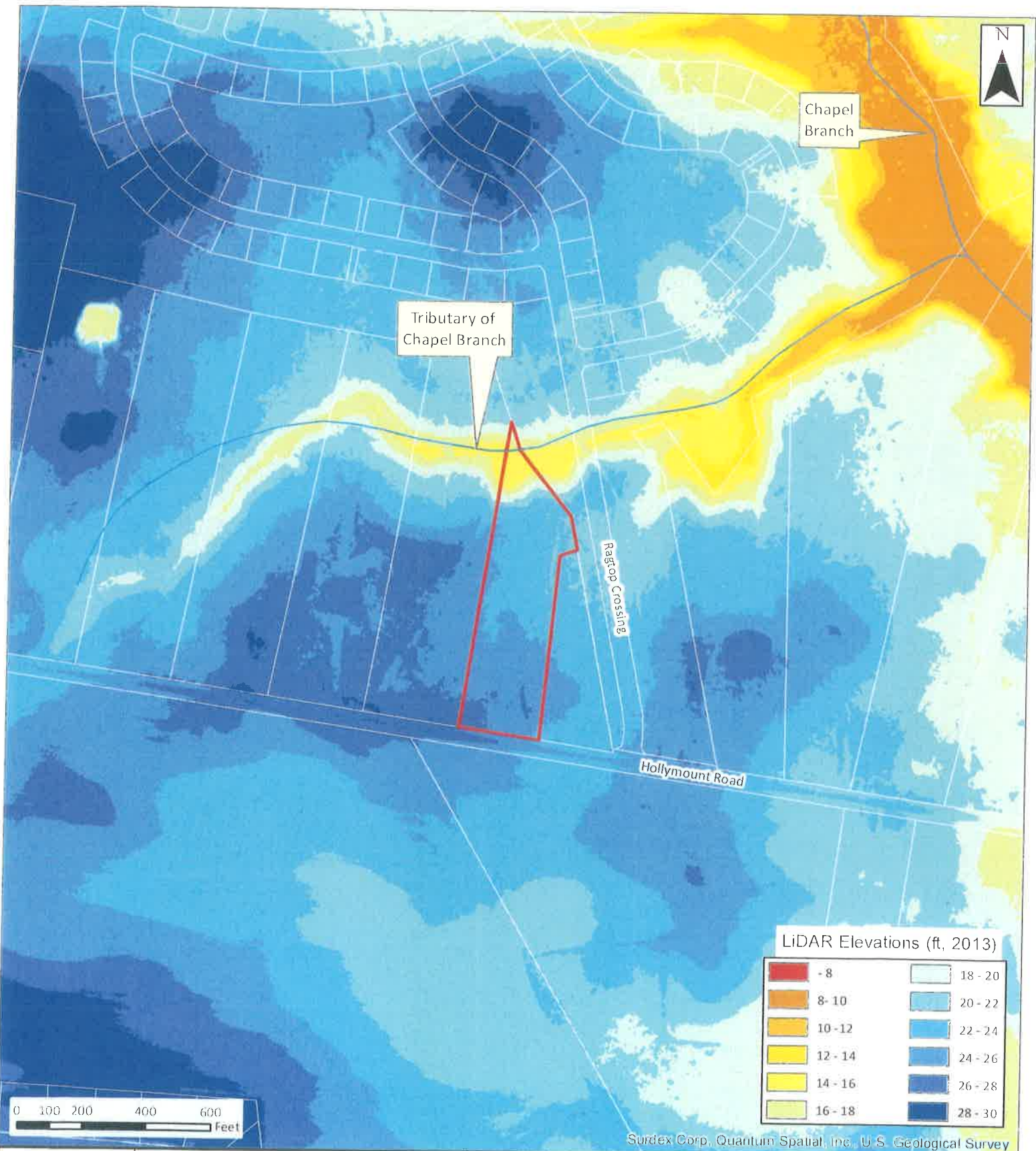
 Subject Parcel
 Other Tax Parcels

Exhibit “11”



LiDAR Elevations (ft, 2013)

- 8	18 - 20
8 - 10	20 - 22
10 - 12	22 - 24
12 - 14	24 - 26
14 - 16	26 - 28
16 - 18	28 - 30

Surdex Corp, Quantum Spatial, Inc, U.S. Geological Survey

LiDAR Elevation Map

Country Lawn Care

CLCMX18001



Exhibit “12”

**COMPLIANCE WITH THE SUSSEX COUNTY ZONING CODE AND
COMPREHENSIVE PLAN UPDATE, JUNE 2008**

The Applicant, **COUNTRY LAWN CARE & MAINTENANCE, LLC** (hereinafter the “Applicant”), has applied for a conditional use of land in an AR-1 Agricultural Residential District for purposes of operating an existing landscaping business known as County Lawn Care & Maintenance, LLC on the property identified by Sussex County Tax Mapping as Parcel 2-34 11.00 78.07 and located at 30435 Hollymount Rd., Harbeson, Delaware (the “Property”). The Property subject to Conditional Use No. 2157 contains approximately 4.26 acres of land, lying and being in Indian River Hundred, Sussex County, and lies on the north side of Hollymount Rd., approximately 0.42 miles east of Beaver Dam Road. The Property is a large, deep parcel that is currently improved with a residential dwelling which is used and occupied by Gerald J. Dougherty III (“Jerry”) and Stephania Maria Dougherty (“Stephania”), as a primary residence. In addition to the residential dwelling, the Property is improved with accessory structures that are currently used for the Dougherty’s personal use as well as for their family-owned and operated landscaping business known as Country Lawn Care & Maintenance, LLC (“Country Lawn Care”). The Applicant proposes a 1,333 square foot addition to one (1) of the existing accessory buildings for purposes of personal storage and a 2,014 square foot addition

to another existing building for purposes of storing the current contents of the sheds that are to be removed from the property, as shown on the Conditional Use Site Plan.

The Dougherty's have been operating Country Lawn Care for nine (9) years. The Dougherty's purchased the Property in June 2016 with the intent to operate their landscaping business from the Property. As the previous owners of the Property also operated a landscaping business from the Property during their ownership, the Dougherty's were unaware that their intended use of the Property was not permitted without a conditional use permit. It was not until the Dougherty's received a violation notice from Sussex County that they discovered that a conditional use permit was required to continue to operate their landscaping business from the Property.

The Property is located in the AR-1 (Agricultural Residential District) under the Sussex County Zoning Code (the "Code"). The purpose of the AR-1 Zoning District 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 objectional, hazardous and unsightly uses." In addition, established agricultural operations and activities should be protected. Conditional Uses allowed within the AR-1 District pursuant to Section 115-22 of the Code include, among other uses, agricultural related industries, such as Country Lawn Care's use, "as well as residential, business, commercial or industrial uses when the purposes of the chapter are more fully met by issuing a conditional use permit."

The Sussex County Comprehensive Plan Update of June 2008 (the "Plan"), under which this application is submitted, finds the Property to be located in the Low Density District. The primary uses envisioned in the Low Density Areas are agricultural activities and single family detached homes. In addition thereto, page 3-18 of the Plan provides that "[b]usiness development should be largely confined to businesses addressing the needs of these two uses... The focus of retail and office uses in Low Density Areas should be providing convenience goods and services to nearby residents."

As permitted by the Code and the Plan, the Dougherty's are using the Property for residential and agricultural related activities that service residents nearby and throughout Sussex County. Stephania manages the day-to-day operations for Country Lawn Care and Jerry is in charge of sales. Country Lawn Care currently has ten (10) employees who, depending on weather conditions, regularly arrive onsite at 7:00 a.m. and depart no later than 7:00 p.m. Monday through Friday. Regular business hours are extended, as necessary, for purposes of snow removal or responding to other weather conditions or emergency situations that necessitate Country Lawn Care's services. Stephania is the only employee that is onsite all day during business hours. While attending to jobs offsite throughout the day, the employees' cars are parked behind the dwelling. In addition to the natural forested buffer around the Subject Property, there is a privacy fence along the side and rear of the Subject Property. The Country Lawn

Care office is not open to the public. Thus, there is no foot traffic that would normally be associated with a retail landscaping business.

In addition, there are no mechanics onsite. Rather, Country Lawn Care refers the repair of its equipment to subcontractors offsite. Only routine maintenance, such as the changing of blades, is done onsite. Any equipment is started no earlier than 7:00 a.m. and then placed on trailers to be used offsite at various jobs throughout the day.

Country Lawn Care does not stock bulk mulch or any other bulk materials. Rather, Country Lawn Care uses bagged materials only. Any waste related to Country Lawn Care's use of the Property is disposed of in a small dumpster located behind the dwelling, which is screened by the natural forested buffer and fence in the rear of the Property.

For the reasons set forth herein, the Dougherty's use of the Property is permitted under the Zoning Code and is consistent with the purposes and the goals of the Comprehensive Land Use Plan. The proposed use will not have any adverse impact on neighboring properties or the surrounding area or uses. Rather, Country Lawn Care has received the support of neighboring property owners. In addition, the proposed use will have no adverse impact on traffic in the area. A Service Level evaluation was requested by the Applicant and DelDOT has advised that a traffic impact study was not recommended. The proposed conditional use will simply facilitate the ability of the Dougherty's to not only reside at the Property, but to continue to operate their

established, local business on the Property and serve the residents and businesses of
Sussex County.

Exhibit “13”

PROPOSED FINDINGS OF FACT AND CONDITIONS
C/U NO. 2157

Based upon the record presented in support of C/U No. 2157, the application of Country Lawn Care & Maintenance, LLC for a conditional use of land in an AR-1 Agricultural Residential District for purposes of operating an existing landscaping business, the Planning and Zoning Commission of Sussex County, Delaware, finds the following facts and makes the following conclusions:

1. The application of Country Lawn Care & Maintenance, LLC seeks a conditional use of land in an AR-1 Agricultural Residential District for purposes of operating an existing landscaping business known as Country Lawn Care & Maintenance.

2. The conditional use of land sought consists of approximately 4.26 acres of land lying and being in Indian River Hundred, Sussex County lying on the north side of Hollymount Rd., approximately 0.42 miles east of Beaver Dam Road.

3. The property is currently improved with a residential dwelling which is used and occupied by Gerald J. Dougherty III and Stephania Maria Dougherty as a primary residence. In addition to the residential dwelling, the property is improved with accessory structures that are currently used for the Dougherty's personal use as

well as for their family-owned and operated landscaping business, Country Lawn Care & Maintenance.

4. The Applicant proposes an addition to one (1) of the existing accessory buildings for purposes of personal storage and an addition to another existing building for purposes of storing the current contents of the sheds that are to be removed from the property, as shown on the Conditional Use Site Plan.

5. The Applicant proposes to continue to operate the existing landscaping business on the property.

6. The property is served by an individual onsite well and an individual onsite septic system and shall comply with DNREC requirements.

7. The proposed use is consistent with the purposes and goals of the Comprehensive Land Use Plan.

8. The property is located in the Low Density Area under the Sussex County Comprehensive Land Use Plan.

9. A conditional use of land sought will have no adverse or detrimental impact on neighboring areas.

10. The Applicant received letters in support of the application.

11. A Service Level evaluation was requested by the Applicant and DelDOT has advised that a traffic impact study was not recommended.

12. There is a natural forested buffer and privacy fence around the property along the side and rear of the property.

13. The hours of operation of the landscaping business will be from 7:00 a.m. through 7:00 p.m. on Monday through Friday. Extended hours are permitted for snow removal and/or to service customers during inclement weather conditions or emergency situations.

14. The landscaping business will not be open to the public.

15. There shall be at least ten (10) parking spaces for employee parking and nine (9) spaces for truck and trailer parking.

16. This property is located in the Herring Creek Watershed per DNREC Environmental Navigator Website. Stormwater discharge will be handled via existing discharge to the watershed.

17. Any security lighting shall be downward screened so that it does not shine on neighboring properties or roadways.

18. The conditional use will afford an existing family-owned and operated business to continue to operate from their home and service the needs of the community in the rapidly expanding district.

Based upon the record and the above findings, the Planning & Zoning Commission recommends that the County Council approve the applied for conditional

use of land as the proposed conditional use is for the purpose of promoting the health, safety, moral, convenience, order and prosperity and welfare of the present and future inhabitants of Sussex County, including amongst other things, the lessening of congestion in the streets or roads, securing safety from fire, flood and other dangers, providing adequate light and air; preventing on the one hand, excessive concentration of population and on the other hand, excessive and wasteful scattering of population or settlement and promoting such distribution of population and such classification of land uses and distribution of land development and utilization as will tend to facilitate and provide adequate provisions for public requirements.

PLANNING & ZONING COMMISSION

ROBERT C. WHEATLEY, CHAIRMAN
KIM HOEY STEVENSON, VICE-CHAIRMAN
DOUGLAS B. HUDSON
R. KELLER HOPKINS
HOLLY J. WINGATE



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 January 24, 2019

Application: CZ 1870 Coroc/Rehoboth III, LLC

Applicant/Owner: Coroc/Rehoboth III, LLC
3200 Northline Ave #360
Greensboro, NC 27408

Site Location: North side of Holland Glade Road, approximately 575 feet east of Coastal Highway.

Current Zoning: AR-1 (Agricultural Residential District)

Proposed Zoning: C-3 (Heavy Commercial District)

Comprehensive Land Use Plan Reference: Highway Commercial and Environmentally Sensitive Developing Areas

Councilmatic District: Mr. Hudson

School District: Cape Henlopen School District

Fire District: Rehoboth Beach Fire District

Sewer: Sussex County

Water: City of Rehoboth

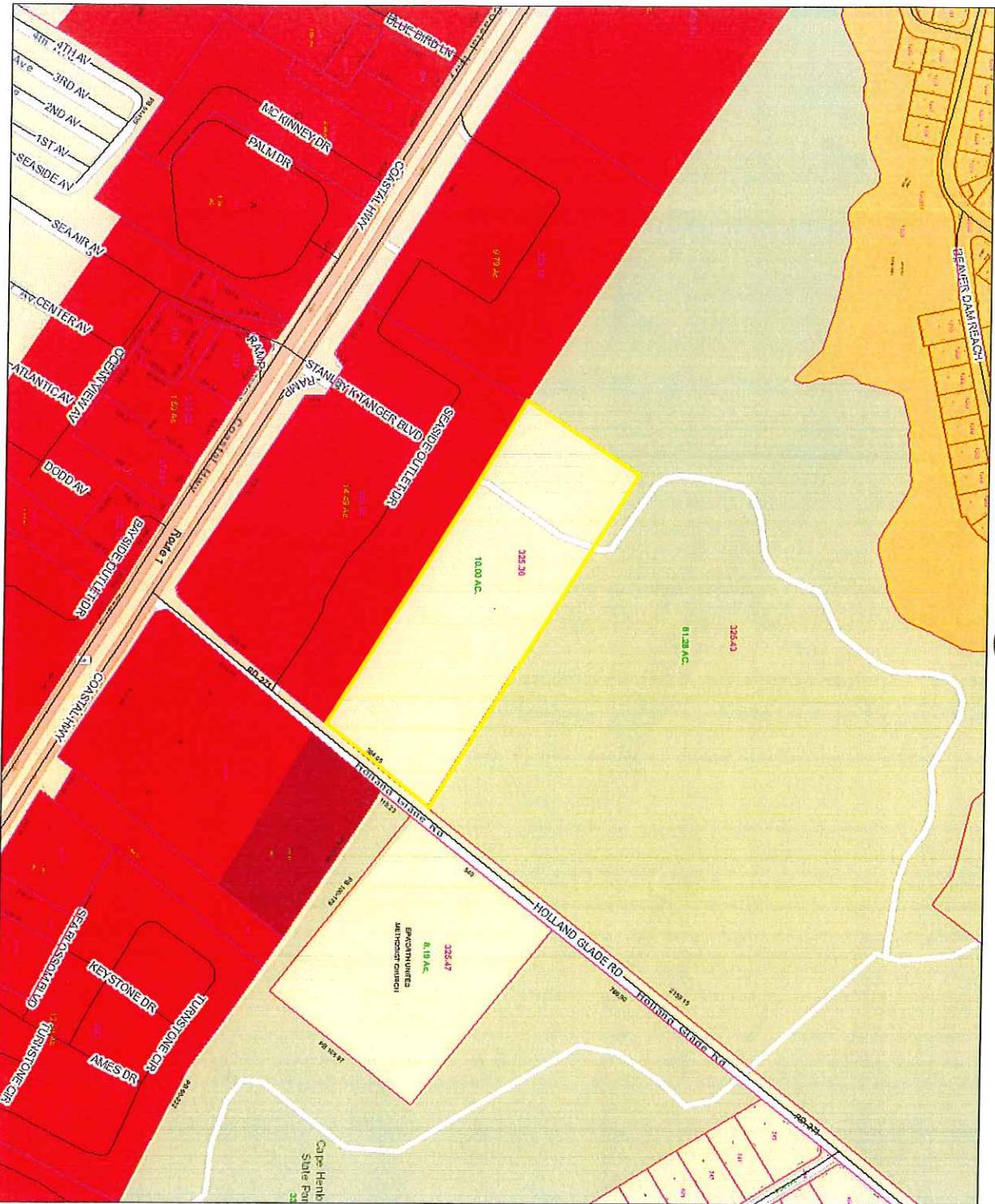
Site Area: 10.00 ac. +/-

Tax Map ID.: 334-13.00-325.36



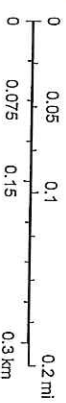


Sussex County



PIN:	334-13.00-325.36
Owner Name	COROC/REHOBOTH III LLC
Book	2931
Mailing Address	3200 NORTHLINE AVE #360
City	GREENSBORO
State	NC
Description	W/S RD 271
Description 2	568' N RT 1
Description 3	N/A
Land Code	

- polyonlayer
 Override 1
 polyonlayer
 Override 1
 Tax Parcels
 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
 - General Commercial - C-1
 - Commercial Residential - CR-1
 - Marine - M
 - Limited Industrial - LI-1
 - Limited Industrial - LI-2
 - Heavy Industrial - HI-1



1:4,514

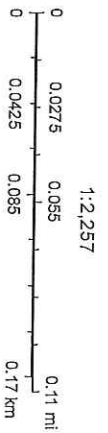


Sussex County



PIN:	334-13-00-325.36
Owner Name	COROC/REHOBOTH III LLC
Book	2931
Mailing Address	3200 NORTHLINE AVE #360
City	GREENSBORO
State	NC
Description	W/S RD 271
Description 2	568' N RT 1
Description 3	N/A
Land Code	

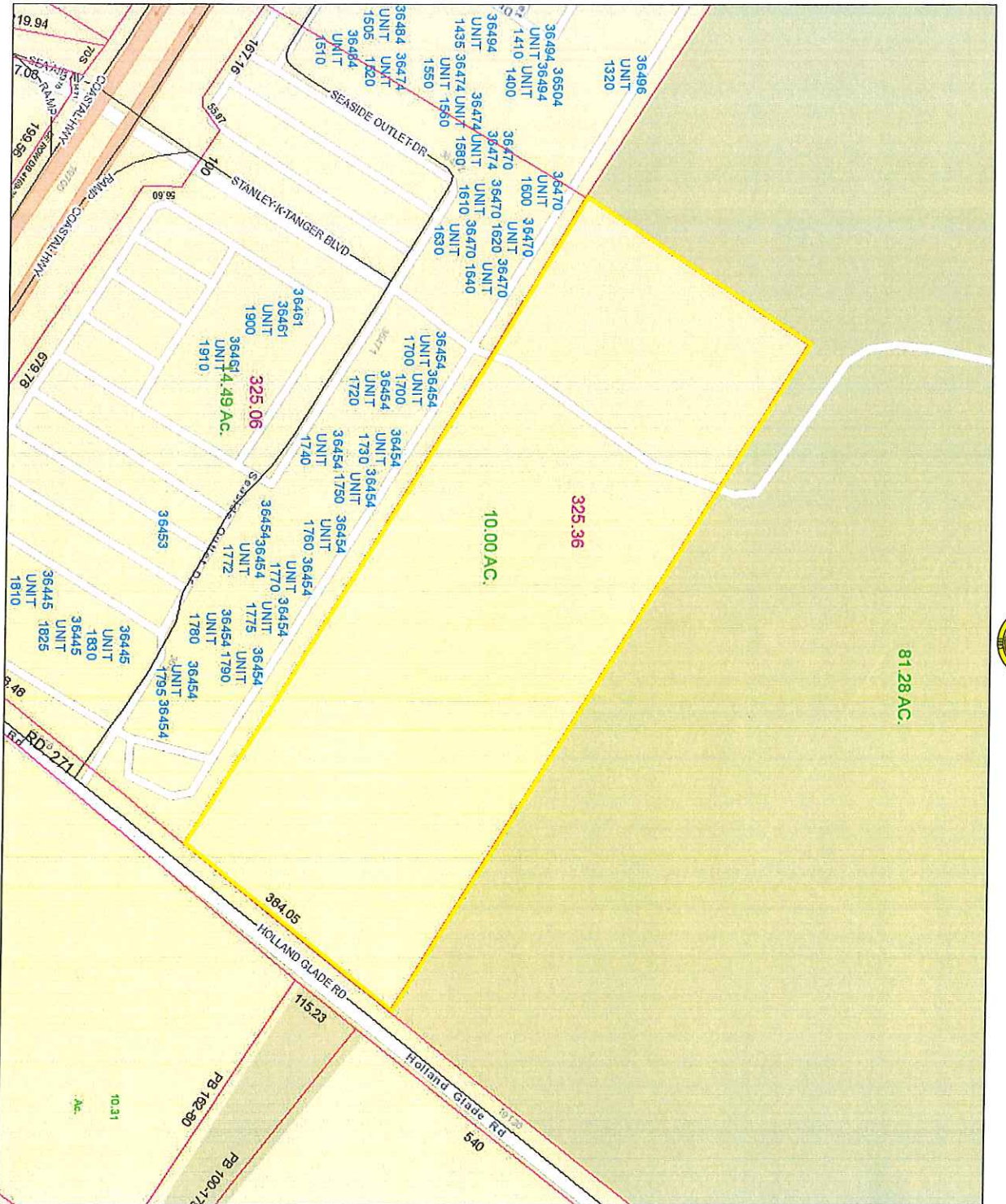
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 Override 1
- polygon/ayer
 Override 1
- Tax Parcels
- 911 Address
- Streets
- County Boundaries



January 3, 2019

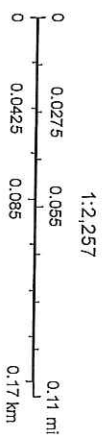


Sussex County



PIN:	334-13-00-325.36
Owner Name	COROC/REHOBOTH III LLC
Book	2931
Mailing Address	3200 NORTHLINE AVE #360
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State	NC
Description	W/S RD 271
Description 2	568' N RT 1
Description 3	N/A
Land Code	

- polygon:ayer
- Override 1
- polygon:ayer
- Override 1
- Tax Parcels
- 911 Address
- Streets
- County Boundaries



PLANNING & ZONING

JANELLE M. CORNWELL, AICP
DIRECTOR

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



Sussex County

DELAWARE
sussexcountyde.gov

Memorandum

To: Sussex County Planning Commission Members
From: Janelle Cornwell, AICP, Planning & Zoning Director
CC: Vince Robertson, Assistant County Attorney and applicant
Date: January 17, 2019
RE: Staff Analysis for CZ 1870 Coroc/Rehoboth III, LLC

This memo is to provide background and analysis for the Planning Commission to consider as a part of application CZ 1870 Coroc/Rehoboth III, LLC to be reviewed during the January 24, 2019 Planning Commission Meeting. This analysis should be included in the record of this application and is subject to comments and information that may be presented during the public hearing.

The request is for a Change of Zone for parcel 334-13.00-325.36 to allow for a landscaping business to be located off Holland Glade Rd. The size of the properties is 10.0 ac. +/-.

The 2008 Sussex County Comprehensive Plan Update (Comprehensive Plan) provides a framework of how land is to be developed. As part of the Comprehensive Plan a Future Land Use Map is included to help determine how land should be zoned to ensure responsible development. The Future Land Use map indicates that the properties have the land use designations of Highway Commercial Areas and Environmentally Sensitive Developing Areas.

The surrounding land uses to the north, south and west are Highway Commercial Areas and Environmentally Sensitive Developing Areas. The land uses to the east are Environmentally Sensitive Developing Areas. The Environmentally Sensitive Developing Areas land use designation recognizes that a range of housing types should be permitted including single-family, townhouses and multi-family and that variety of office and retail uses would be appropriate in many areas and that business and industrial parks with good road access would be appropriate. It also recognizes that mixture of homes with light commercial and institutional uses could be appropriate to provide for convenient services and let people work close to home. The Highway Commercial Areas recognizes that these areas include concentrations of retail and services uses near highways and that the commercial uses should be geared towards vehicular traffic.

The property is zoned AR-1 (Agricultural Residential District). The properties to the north are AR-1 (Agricultural Residential District) and C-1 (General Commercial District). The properties to the south and west are zoned C-1 (General Commercial District). The properties to the east are zoned AR-1 (Agricultural Residential District). There are no known Conditional Uses in the area.

Based on the analysis of the land use, surrounding zoning and uses, the Change of Zone from AR-1 (Agricultural Residential District) to C-3 (Heavy Commercial District) could be considered consistent with the land use, area zoning and uses.





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

JENNIFER COHAN
SECRETARY

August 10, 2018

Ms. Janelle Cornwell, Director
Sussex County Planning & Zoning
P.O. Box 417
Georgetown, DE 19947

Dear Ms. Cornwell:

The Department has completed its review of a Service Level Evaluation Request for the **Tanger Outlet Centers** rezoning application, which we received on July 24, 2018. This application is for a 10.00-acre parcel (Tax Parcel: 334-13.00-325.36). The subject land is located on the northwest side of Holland Glade Road (Sussex Road 271), approximately 600 feet northwest of the intersection of Delaware Route 1 and Holland Glade Road. The subject land is currently zoned AR-1 (Agricultural Residential), and the applicant is seeking to rezone the land to C-3 (Heavy Commercial).

Per the 2017 Delaware Vehicle Volume Summary, the annual average and summer average daily traffic volumes along the segment of Holland Glade Road where the subject land is located are 3,255 and 4,283 vehicles per day, respectively.

Our volume-based criteria for requiring a traffic impact study (TIS), addressed in Section 2.2.2.1 of the Development Coordination Manual, are that a development generates more than 500 trips per day or 50 trips during a weekly peak hour. While it seems that the above criteria could be met, we presently cannot predict the site's trip generation with enough accuracy to make a TIS useful. Thus, we recommend that this rezoning application be considered without a TIS and that the need for a TIS be evaluated when a subdivision or land development plan is proposed.



Ms. Janelle M. Cornwell
Page 2 of 2
August 10, 2018

Please contact Mr. Claudy Joinville, at (302) 760-2124, if you have questions concerning this correspondence.

Sincerely,



T. William Brockenbrough, Jr.
County Coordinator
Development Coordination

TWB:cjm

cc: Constance C. Holland, Coordinator, Cabinet Committee on State Planning Issues
Tanger Outlet Centers, Applicant
J. Marc Coté, Assistant Director, Development Coordination
Gemez Norwood, South District Public Works Manager, Maintenance and
Operations
Steven Sisson, Sussex County Subdivision Coordinator, Development Coordination
Derek Sapp, Subdivision Manager, Development Coordination
Brian Yates, Subdivision Manager, Development Coordination
Susanne Laws, Subdivision Manager, Development Coordination
Troy Brestel, Project Engineer, Development Coordination
Claudy Joinville, Project Engineer, Development Coordination

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

RECEIVED

JAN 11 2019

SUSSEX COUNTY
PLANNING & ZONING

TO: Janelle Cornwell
REVIEWER: Chris Calio
DATE: 1/4/2019
APPLICATION: CZ 1870 Coroc/Rehoboth III, LLC
APPLICANT: Coroc/Rehoboth III, LLC
FILE NO: OM-9.04
TAX MAP &
PARCEL(S): 334-13.00-325.36
LOCATION: North side of Holland Glade Road, approximately 575 feet east
of Coastal Highway
NO. OF UNITS: Up zone from AR-1 to C-3
GROSS
ACREAGE: 10.00
SYSTEM DESIGN ASSUMPTION, MAXIMUM NO. OF UNITS/ACRE: 4

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 1**
- (3). Is wastewater capacity available for the project? **Yes** If not, what capacity is available? **N/A**.
- (4). Is a Construction Agreement required? **Yes** If yes, contact Utility Engineering at (302) 855-7717.
- (5). Are there any System Connection Charge (SCC) credits for the project? **No** If yes, how many? **N/A**. Is it likely that additional SCCs will be required? **Yes** If yes, the current System Connection Charge Rate is **\$6,360.00** per EDU. Please contact **Christine Fletcher** at **302-855-7719** for additional information on charges.

- (6). Is the project capable of being annexed into a Sussex County sanitary sewer district? **N/A**
- Attached is a copy of the Policy for Extending District Boundaries in a Sussex County Water and/or Sanitary Sewer District.
- (7). Is project adjacent to the Unified Sewer District? **N/A**
- (8). Comments: **The parcel is not currently served with a lateral and significant infrastructure will need to be installed at the landowner/developers expense.**
- (9). Is a Sewer System Concept Evaluation required? **Yes, Contact Utility Planning at 302-855-1299 to apply**
- (10). Is a Use of Existing Infrastructure Agreement Required? **Yes**

UTILITY PLANNING APPROVAL:



John J. Ashman
Director of Utility Planning

Xc: Hans M. Medlarz, P.E.
Jayne Dickerson
Christine Fletcher



ARCHITECTS ENGINEERS SURVEYORS

January 10, 2019

Michael R. Wigley, AIA, LEED AP
W. Zachary Crouch, P.E.
Michael E. Wheedleton, AIA
Jason P. Loar, P.E.
Ring W. Lardner, P.E.

Sussex County Administrative Building
Planning and Zoning Department
2 The Circle
P.O. Box 589
Georgetown, Delaware 19947

Attn: Ms. Janelle Cornwell, ACIP
Director of Planning

RECEIVED

Re: Tanger Outlets - Seaside Rezoning
Tax Parcel No.: 334-13.00-325.26
DBF #1360C001

JAN 11 2019
SUSSEX COUNTY
PLANNING & ZONING

Dear Ms. Cornwell:

We have read and reviewed the comments provided during the PLUS Review of the Project on August 22, 2018, and received from the Office of State Planning dated September 20, 2018. We offer the following item-by-item response narrative for your review:

Strategies for State Policies and Spending

This project is located in Investment Levels 2 and 3 according to the Strategies for State Policies and Spending. Investment Level 2 reflects areas where growth is anticipated by local, county, and State plans in the near term future. Investment Level 3 reflects areas where growth is anticipated by local, county, and state plans in the longer term future, or areas that may have environmental or other constraints to development. State investments may support future growth in these areas, but please be advised that the State has other priorities for the near future. We encourage you to design the site with respect for the environmental features which are present.

Code Requirements/Agency Permitting Requirements

Department of Transportation – Contact Bill Brockenbrough 760-2109

- *The subject land would have access on Holland Glade Road (Sussex Road 271) either directly or through other lands of the applicant and also on Delaware Route 1 through other lands of the applicant. The site access must be designed in accordance with DelDOT's Development Coordination Manual. A copy of the Manual is available at <http://www.deldot.gov/information/business/subdivisions/changes/index.shtml>. DelDOT will comment further when a plan is available.*
- *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. If the County approves this rezoning, they will revisit the need for a TIS when a site plan is presented.*
- *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 Holland Glade Road. By this regulation, this dedication is to provide a minimum of 30 feet of right-of-way from the physical centerline of the road. 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 Holland Glade 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.**"*
- *Section 3.5.4.2 of the Manual addresses requirements for shared-use paths and sidewalks. Referring to Section 3.5.4.2.A of the Manual, developments in Level 1 and 2 Areas are required to install a sidewalk or Shared Use Path along their frontage. DelDOT may accept a fee in lieu of construction where a physical impossibility exists but no such impossibility is evident.*
- *In accordance with Section 5.2.9 of the Manual, the Auxiliary Lane Worksheet should be used to determine whether turning lanes are warranted at the site entrance, if a new entrance is proposed and how long the lanes should be at the existing entrances. The worksheet can be found at <http://www.deldot.gov/Business/subdivisions/index.shtml>.*

We have read the above comments and are familiar with the Delaware Department of Transportation's manuals and regulations. We will schedule the appropriate meetings and subsequently prepare a set of documents complying with their regulations.

Ms. Janelle Cornwell
Tanger Outlets – PLUS Response
January 10, 2019
Page 3

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

- *The Department of Natural Resources and Environmental Control did not submit comments regarding this application. If the development of this property requires permits from a DNREC section, please contact the DNREC regulatory agency directly.*

Appropriate meetings will be scheduled with the Sussex Conservation District to discuss any future development plans. Permits will be obtained as required.

State Historic Preservation Office – Contact Carlton Hall 736-7404

- *There are no known archaeological sites, or known National Register-listed or eligible properties on the parcel.*
- *If any project or development proceeds, the developer should be aware of the Unmarked Human Burials and Human Skeletal Remains Law. 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.*

Disturbing unmarked graves or burials triggers the Delaware's Unmarked Human Burials and Human Skeletal Remains Law (Del. C. Title 7, Ch. 54). For more information, please review the following websites: www.history.delaware.gov/preservation/umhr.shtml and www.history.delaware.gov/preservation/cemeteries.shtml.

- *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 review process please review the Advisory Council on Historic Preservation's website at: www.achp.gov*

We have read the above comments and are familiar with Delaware's Unmarked Human Burials and Skeletal Remains Law. If federal involvement occurs, we will ensure compliance with the National Historic Preservation Act as described above.

Ms. Janelle Cornwell
Tanger Outlets – PLUS Response
January 10, 2019
Page 4

Recommendations/Additional Information

*This section includes a list of site specific suggestions that are intended to enhance the project. These suggestions have been generated by the State Agencies based on their expertise and subject area knowledge. **These suggestions do not represent State code requirements.** They are offered here in order to provide proactive ideas to help the applicant enhance the site design, and it is hoped (**but in no way required**) that the applicant will open a dialogue with the relevant agencies to discuss how the suggestions can benefit the project.*

Department of Transportation – Contact Bill Brockenbrough 760-2109

- *Presently the subject land provides trailhead parking for a connection to the Junction and Breakwater Trail. If the County approves the rezoning and the applicant develops the property, DelDOT asks that they work with DelDOT's Bicycle and Pedestrian Coordinator, Mr. Anthony Aglio, to maintain a trailhead and a connection to the trail.*
- *DelDOT is interested in exploring the feasibility of a service road, extending northwest from Holland Glade Road parallel to Delaware Route 1 behind the existing outlet shopping center and connecting to the parking lot of the K-mart shopping center. They would like to meet with the applicant to discuss how such a road could be routed through the subject lands.*

We have read the above comments and we will schedule the appropriate meetings to discuss the above requests and their feasibility.

On behalf of the Developer we thank the State for providing us with these comments. Please contact me at (302) 424-1441 if you have any questions or need additional information.

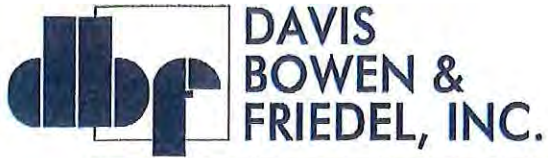
Sincerely,
DAVIS, BOWEN & FRIEDEL, INC.



Ring W. Lardner, P.E.
Principal

P:\Tanger Outlets\Seaside - 10 Acre Expansion\Docs\PLUS\Tanger PLUS response.doc

Cc: James A. Fuqua, Fuqua, Yori & Willard, P.A.
Charles A. Worsham, Coroc / Rehoboth III, LLC



ARCHITECTS ENGINEERS SURVEYORS

January 10, 2019

Michael R. Wigley, AIA, LEED AP
W. Zachary Crouch, P.E.
Michael E. Wheedleton, AIA
Jason P. Loar, P.E.
Ring W. Lardner, P.E.

Sussex County Administrative Building
Planning and Zoning Department
2 The Circle
P.O. Box 589
Georgetown, Delaware 19947

Attn: Ms. Janelle Cornwell
Director of Planning

Re: Tanger Outlets Seaside Rezoning
Environmental Assessment and Public Facility Evaluation Report
Tax Parcel No: 3-34-13.00-325.36
DBF #1360C001.C01

Dear Ms. Cornwell,

On behalf of our client, Coroc / Rehoboth III, LLC, we are submitting an Environmental Assessment and Public Facility Evaluation Report in accordance with §115-194.3. ES-1 Environmentally Sensitive Development District Overlay Zone (ESDDOZ), Subparagraph B (2). We offer the following information that comprises our report:

- (a) *Proposed Drainage design and the effect on stormwater quality and quantity leaving the site, including methods for reducing the amount of phosphorous and nitrogen in the stormwater runoff and the control of any other pollutants such as petroleum hydrocarbons or metals. The proposed improvements will meet or exceed the state regulations for quality and quantity control. The project design will include the use of green technologies to reduce the runoff from the site.*

- (b) *Proposed method of providing potable and, where appropriate, irrigation water and the effect on public or private water systems and groundwater, including an estimate of average and peak demands. The surrounding area is served by Tidewater Utilities, Inc. The eastern half (approximately) of the parcel is located within a wellhead protection area. The project will comply with the County's Source Water Protection Ordinance. At full build-out, the average water use is estimated to be 22,800 gallons per day and a peak use of 68,400 gallons per day.*

- (c) *Proposed means of wastewater treatment and disposal with an analysis of the effect on the quality of groundwater and surface waters, including alternative locations for on-site septic systems.* The proposed project is located within the West Rehoboth Expansion of the Dewey Beach Sanitary Sewer District for Sussex County Sewer. The project is estimated to require seventy-six (76) EDUs. Once a Sewer Concept Plan is approved the parcel may be annexed into the Sussex County Unified Sewer District. The proposed project will be served by the County's sewer system.
- (d) *Analysis of the increase in traffic and the effect on the surrounding roadway system.* A Service Level Evaluation Request response was received from DelDOT by the county on August 10, 2018. Required mitigation measures for the impact the proposed improvements will have on the existing roadway system will be determined by DelDOT during the Entrance plan review stage.
- (e) *The presence of any endangered or threatened species listed on federal or state registers and proposed habitat protection areas.* There are no known endangered or threatened species listed on federal or state registers or proposed habitat protection areas located on the property.
- (f) *The preservation and protection from loss of any tidal or nontidal wetlands on the site.* The project site does not contain tidal or non-tidal wetlands.
- (g) *Provisions for open space as defined in §115-4.* The rezoning application is seeking a C-3 zoning designation which does not have open requirements.
- (h) *A description of provisions for public and private infrastructure.* The Applicant will install all infrastructure at the sole cost to the Applicant. Public infrastructure will include sanitary sewer and drinking water infrastructure and minor roadway improvements within the State of Delaware roadway. All other improvements will be private.
- (i) *Economic, recreational or other benefits.* The proposed project will provide additional commercial options for residents in the neighboring areas that will divert traffic from the Route 1 corridor and provide jobs leading to an economic benefit for the County.
- (j) *The presence of any historic or cultural resources that are listed on the National Register of Historic Places.* The site does not contain any historic or cultural resources that are listed on the National Register of Historic Places.
- (k) *An affirmation that the proposed application and proposed mitigation measures are in conformance with the current Sussex County Comprehensive Plan.* The proposed application and mitigation measures comply with the current Sussex County Comprehensive Plan.

Coroc / Rehoboth III, LLC
January 10, 2019
Page 3

- (l) *Actions to be taken by the applicant to mitigate the detrimental impacts identified relevant to Subsection B(2)(a) through (k) above and the manner by which they are consistent with the Comprehensive Plan. All mitigation measures, where required, have been discussed in their respective section. All mitigation measures as well as the application are consistent with the Comprehensive Plan.*

If you have any questions or need additional information, please do not hesitate to contact me via phone at (302) 424-1441 or via e-mail at rwl@dbfinc.com.

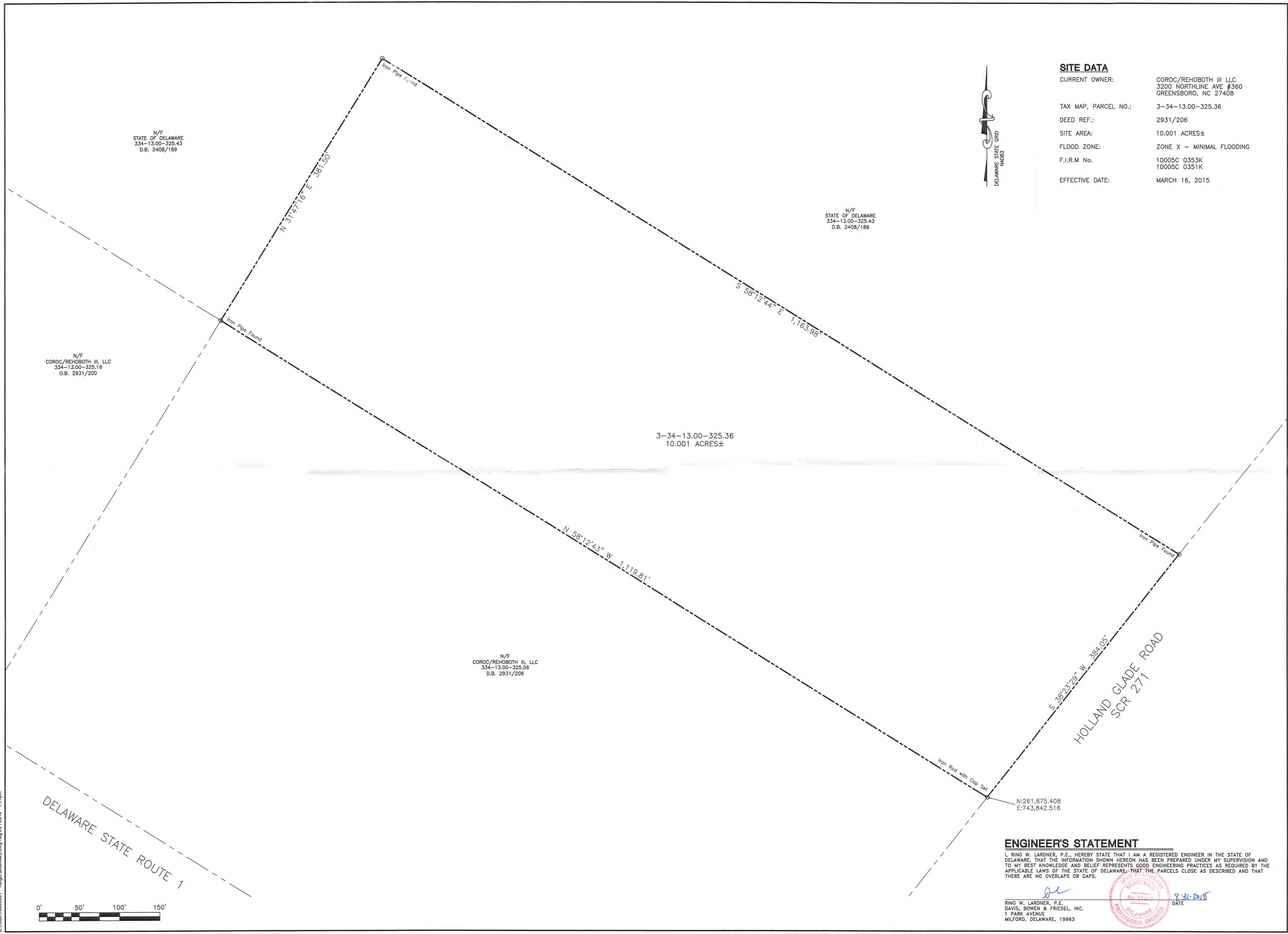
Sincerely,
Davis, Bowen & Friedel, Inc.



Ring W. Lardner, P.E.
Principal

P:\Tanger Outlets\Seaside - 10 Acre Expansion\Docs\P&Z\Environmental Assessment and Public Facility Evaluation Report\Tanger Seaside Rezoning_ESDDOZ Report.docx

S:\1360\1360C001 - Tangier\Boundary.dwg Aug 29, 2018 - 1:41pm



N/F
STATE OF DELAWARE
334-13.00-325.43
D.B. 2408/189

N/F
STATE OF DELAWARE
334-13.00-325.43
D.B. 2408/189

N/F
COROC/REHOBOTH III, LLC
334-13.00-325.16
D.B. 2931/200

3-34-13.00-325.36
10.001 ACRES±

N/F
COROC/REHOBOTH III, LLC
334-13.00-325.06
D.B. 2931/206

SITE DATA

CURRENT OWNER: COROC/REHOBOTH III LLC
3200 NORTHLINE AVE #360
GREENSBORO, NC 27408

TAX MAP, PARCEL NO.: 3-34-13.00-325.36

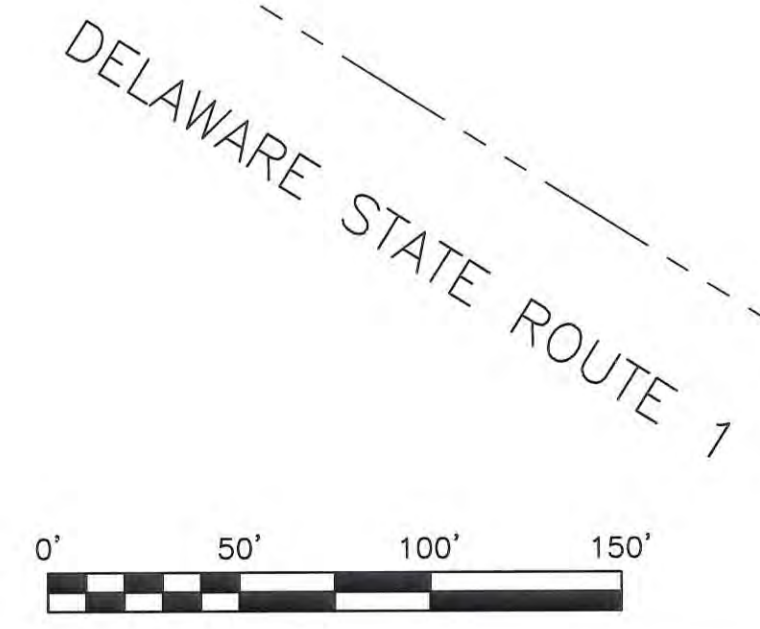
DEED REF.: 2931/206

SITE AREA: 10.001 ACRES±

FLOOD ZONE: ZONE X - MINIMAL FLOODING

F.I.R.M No. 10005C 0353K
10005C 0351K

EFFECTIVE DATE: MARCH 16, 2015



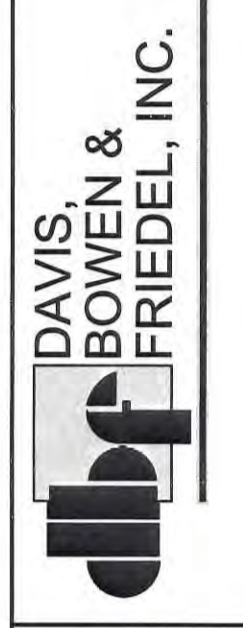
ENGINEER'S STATEMENT

I, RING W. LARDNER, P.E., HEREBY STATE THAT I AM A REGISTERED ENGINEER IN THE STATE OF DELAWARE, THAT THE INFORMATION SHOWN HEREON HAS BEEN PREPARED UNDER MY SUPERVISION AND TO MY BEST KNOWLEDGE AND BELIEF REPRESENTS GOOD ENGINEERING PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE; THAT THE PARCELS CLOSE AS DESCRIBED AND THAT THERE ARE NO OVERLAPS OR GAPS.

[Signature]
RING W. LARDNER, P.E.
DAVIS, BOWEN & FRIEDEL, INC.
1 PARK AVENUE
MILFORD, DELAWARE, 19963

DATE: 8-31-2018

ARCHITECTS ENGINEERS SURVEYORS
SALISBURY, MARYLAND (410) 643-9993
MILFORD, DELAWARE (302) 424-1441



BOUNDARY SURVEY PLAN
of the Lands of
COROC/ REHOBOTH III, LLC
LEWES & REHOBOTH HUNDRED
SUSSEX COUNTY, DELAWARE

Revisions:

Date: AUGUST 2018

Scale: 1"=50'

Dwn.By: EWT

Proj.No.: 1360C001

Dwg.No.:

1 OF 1



Tanger Outlets

SEASIDE REZONING
Sussex County, Delaware

1360C001.C01
JANUARY 2019

Tanger[®]
Outlets

 DAVIS
BOWEN &
FRIEDEL, INC.
ARCHITECTS • ENGINEERS • SURVEYORS

Exhibits

1. Project Information
2. Maps
 - a. Surrounding Communities
 - b. Flood Insurance Rate Map (FIRM) from FEMA
 - c. 2015 State Strategies Map
 - d. Future Land Use Map
 - e. Sussex County Zoning Map
 - f. 1992 Aerial Map
 - g. 2017 Aerial Map
 - h. Environmental
 - i. Source Water Protection Areas
 - j. NRCS Soil Survey
 - k. Beers Atlas – Lewes and Rehoboth
3. Preliminary Land Use Services (PLUS) Response
4. Environmental Assessment and Public Facility Report
5. DelDOT Support Facilities Report
6. Deed
7. Legal Description
8. Rezoning Application
9. Rezoning Plan

Exhibit 1

A. Land Use & Zoning

1. The business name is Tanger Outlets – Seaside.
2. The property is located northeast of Coastal Highway (SR-1) and northwest of Holland Glade Road behind the existing Seaside Tanger Outlets.
3. The Owner of the properties are Coroc / Rehoboth III, LLC.
4. The property is currently zoned AR-1 (Agricultural Residential).
5. The property is adjacent to land zoned General Commercial (C-1).
6. The property is located in the Level 2 and 3 Areas of the 2015 State Strategies Map.
7. The property is located within the Environmentally Sensitive Developing District Overlay Zone (ESDDOZ).

B. Land Utilization

1. The total acreage of land to be rezoned is 10 +/- acres of land.
2. The proposed project is currently used for stormwater management and additional parking for the Tanger Outlets - Seaside, Junction and Breakwater Trail trailhead parking, and miscellaneous storage for the Tanger Outlets - Seaside.
3. The property owner wishes to rezone the property to allow for potential expansion or other needs of the community.

C. Environmental

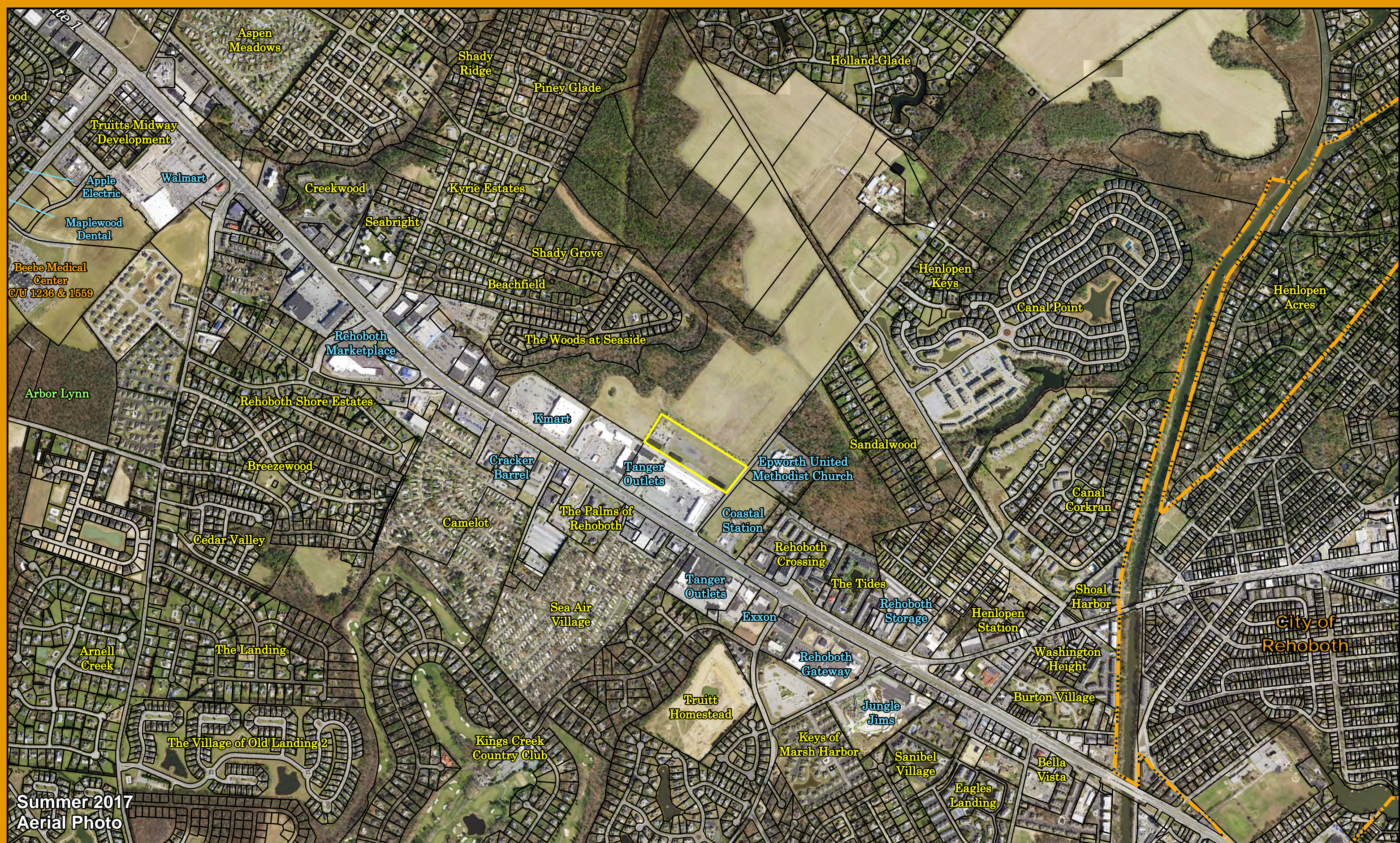
1. The property does not contain federal wetlands as indicated on the National Wetland Inventory Map.
2. The project is not located in the floodplain.
3. The P.L.U.S. comments provided to the Developer did not identify endangered species or critical habitat on the property.

4. There are no known archaeological sites or National Register-listed properties on the parcels of land.

D. Traffic

1. A Support Facilities Report was completed for this project.
2. A Traffic Impact Study is not required for the rezoning according to DelDOT. DelDOT will revisit the need for a TIS when a site plan is presented.

Exhibit 2



Summer 2017
Aerial Photo

Sources:
Tax Parcels per Sussex County



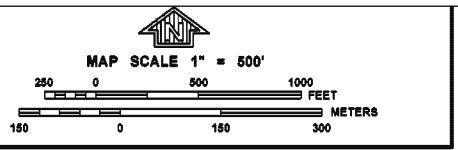
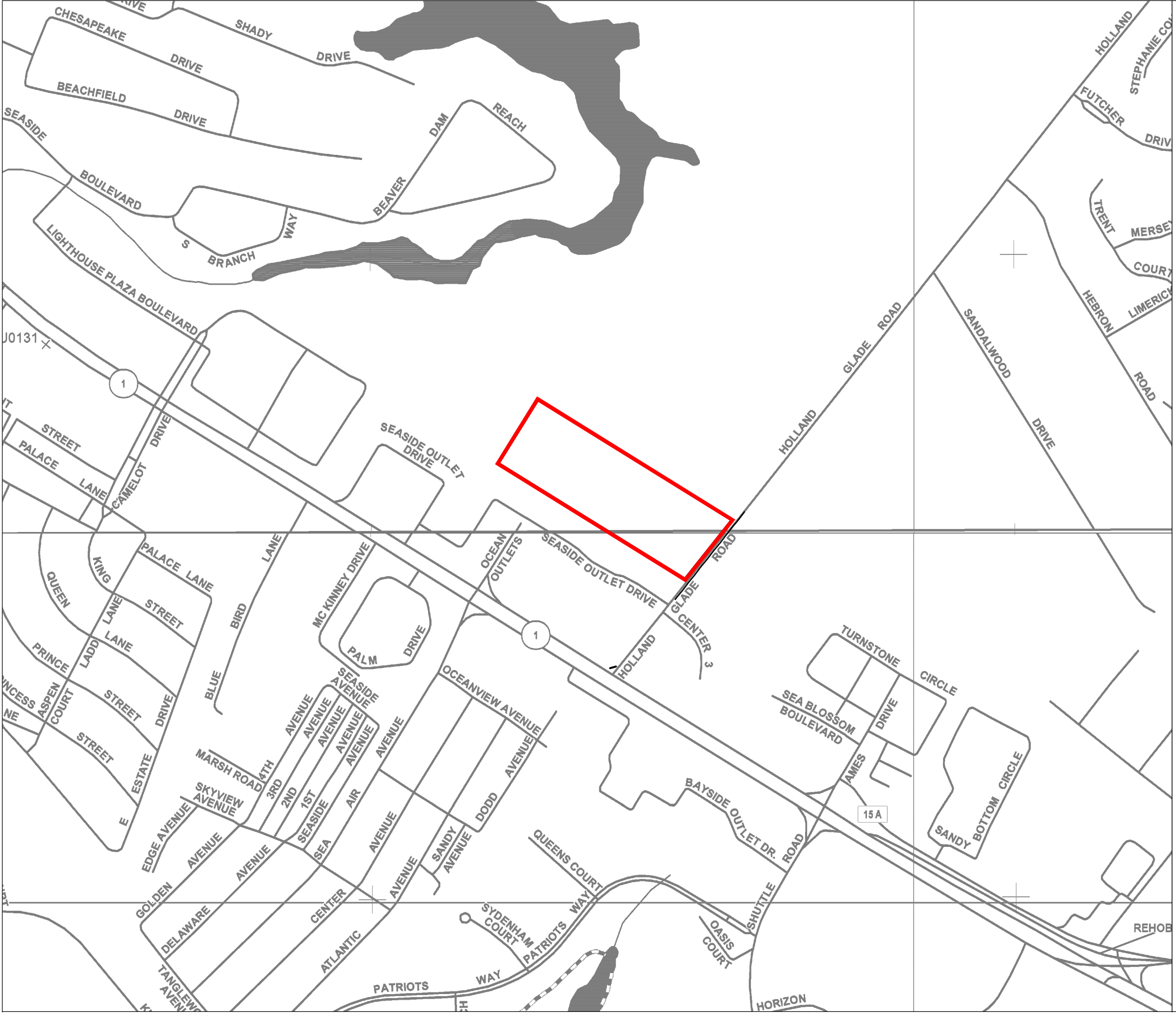
December 2018

Surrounding Communities Map

Tanger Outlets - Seaside Rezoning

Sussex County, Delaware





PANEL 0351K

FIRM
FLOOD INSURANCE RATE MAP

**SUSSEX COUNTY,
 DELAWARE
 AND INCORPORATED AREAS**

PANEL 351 OF 660
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
REHOBOTH BEACH, CITY OF	105088	0351	K
SUSSEX COUNTY	100029	0351	K

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
10005C0351K

MAP REVISED
MARCH 16, 2015

Federal Emergency Management Agency

PANEL 0353K

FIRM
FLOOD INSURANCE RATE MAP

**SUSSEX COUNTY,
 DELAWARE
 AND INCORPORATED AREAS**

PANEL 353 OF 660
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
REHOBOTH BEACH, CITY OF	155368	0353	K
SUSSEX COUNTY	100029	0353	K

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

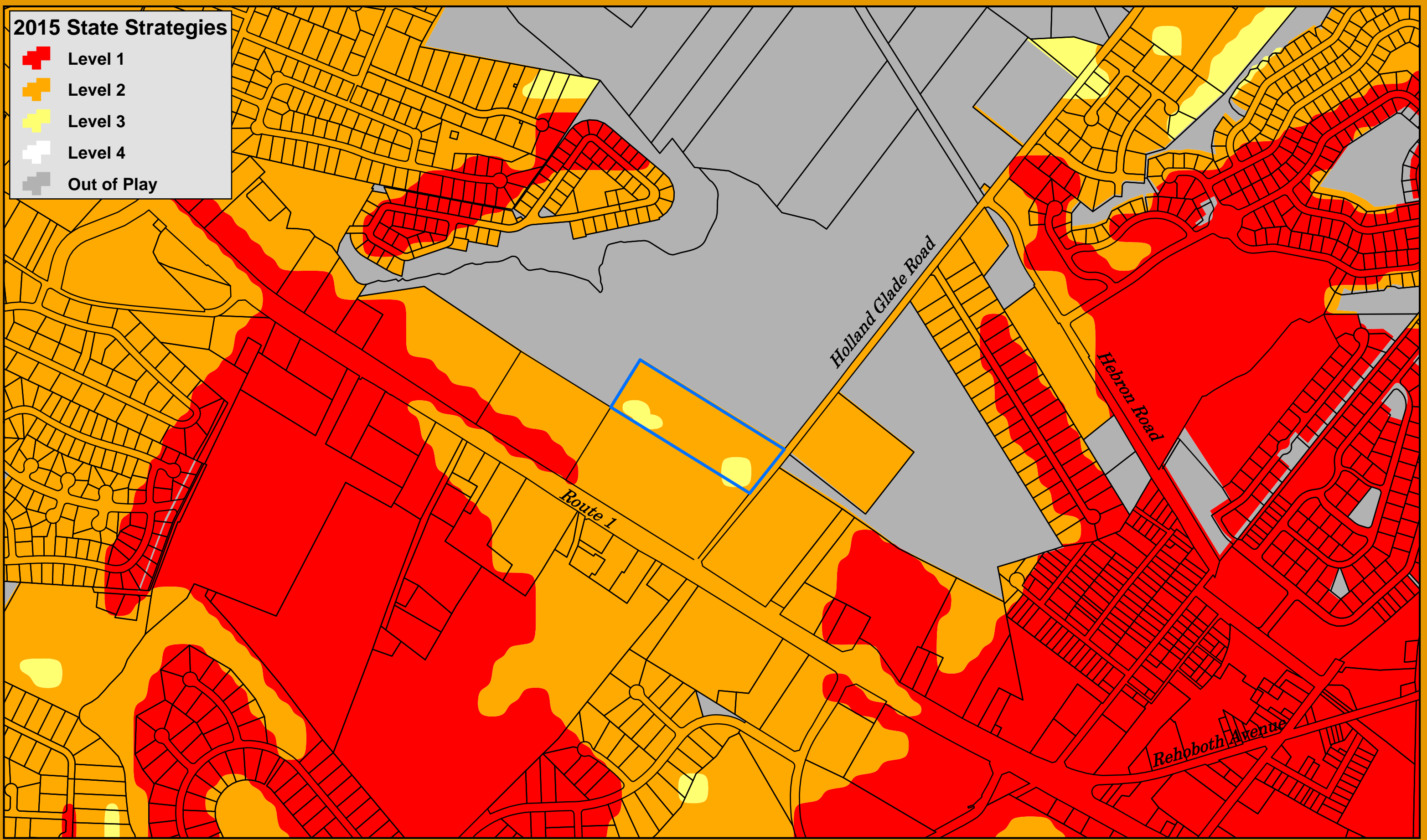
MAP NUMBER
10005C0353K

MAP REVISED
MARCH 16, 2015

Federal Emergency Management Agency

2015 State Strategies

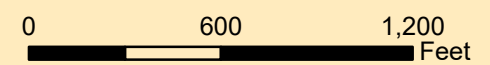
-  Level 1
-  Level 2
-  Level 3
-  Level 4
-  Out of Play





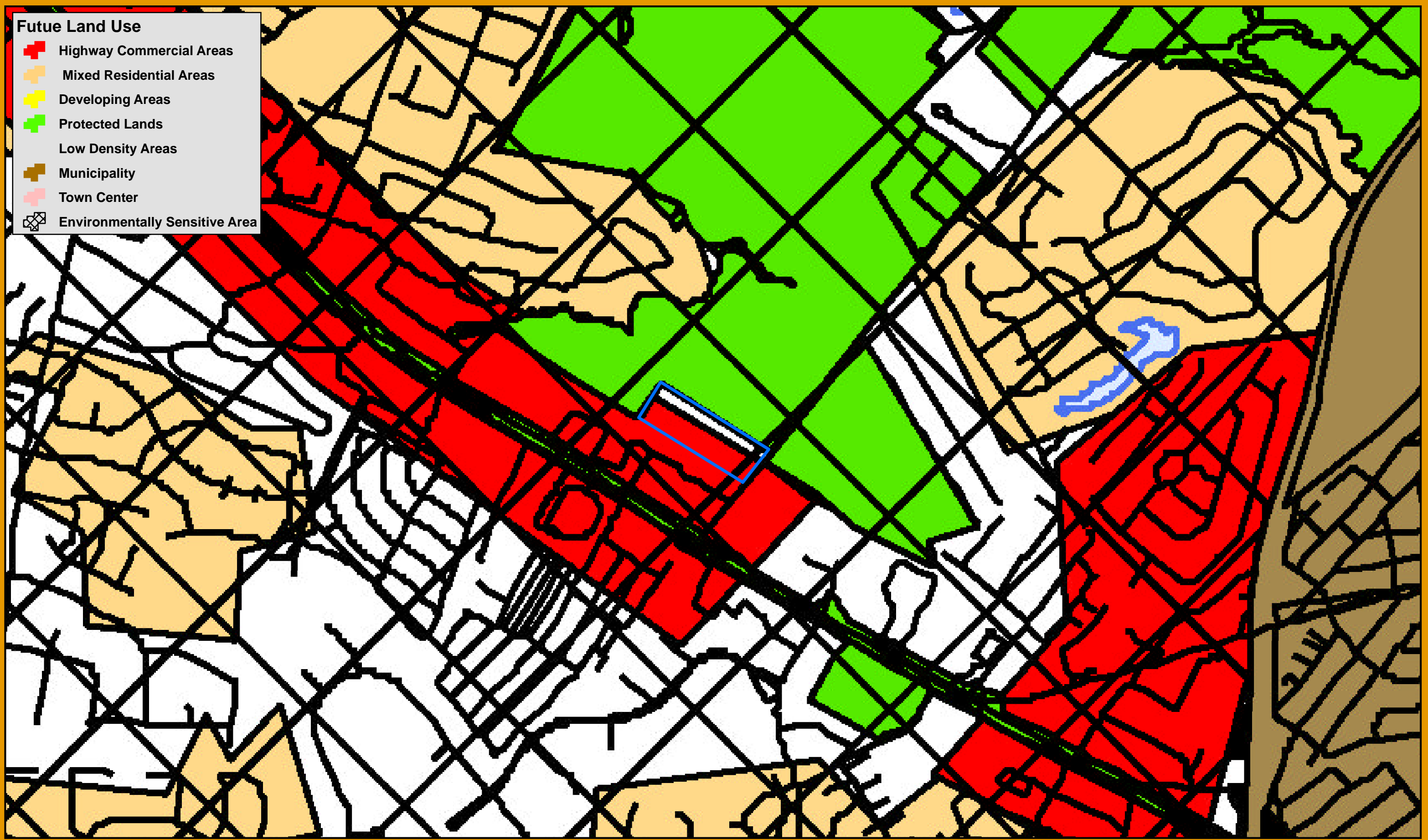
Sources:
Tax Parcels per Sussex County



2015 State Strategies
Tanger Outlets - Seaside Rezoning
Sussex County, Delaware



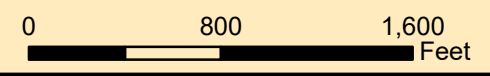
- Future Land Use**
-  Highway Commercial Areas
 -  Mixed Residential Areas
 -  Developing Areas
 -  Protected Lands
 -  Low Density Areas
 -  Municipality
 -  Town Center
 -  Environmentally Sensitive Area

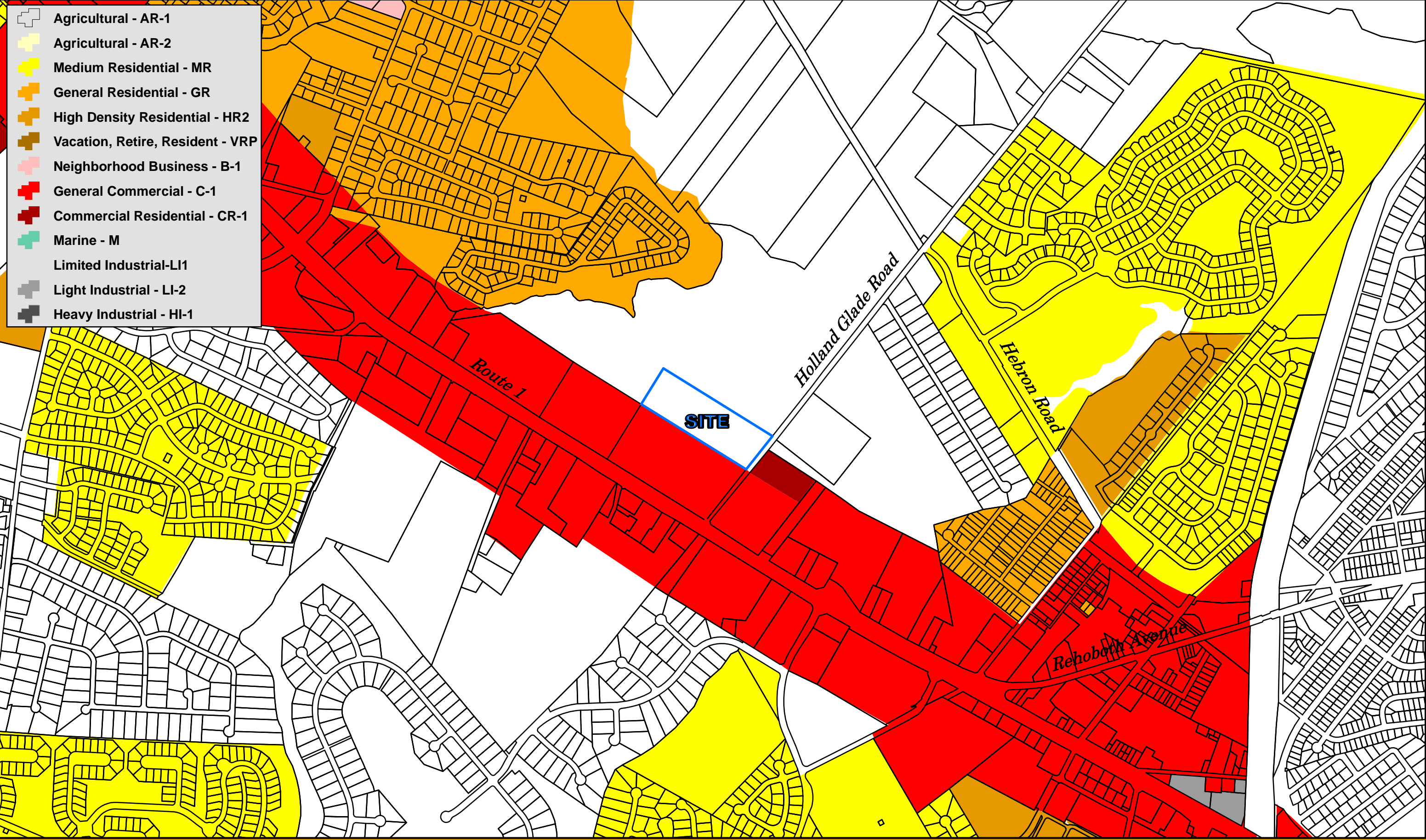










Entire Site is within the
Environmental Sensitive Developing Area

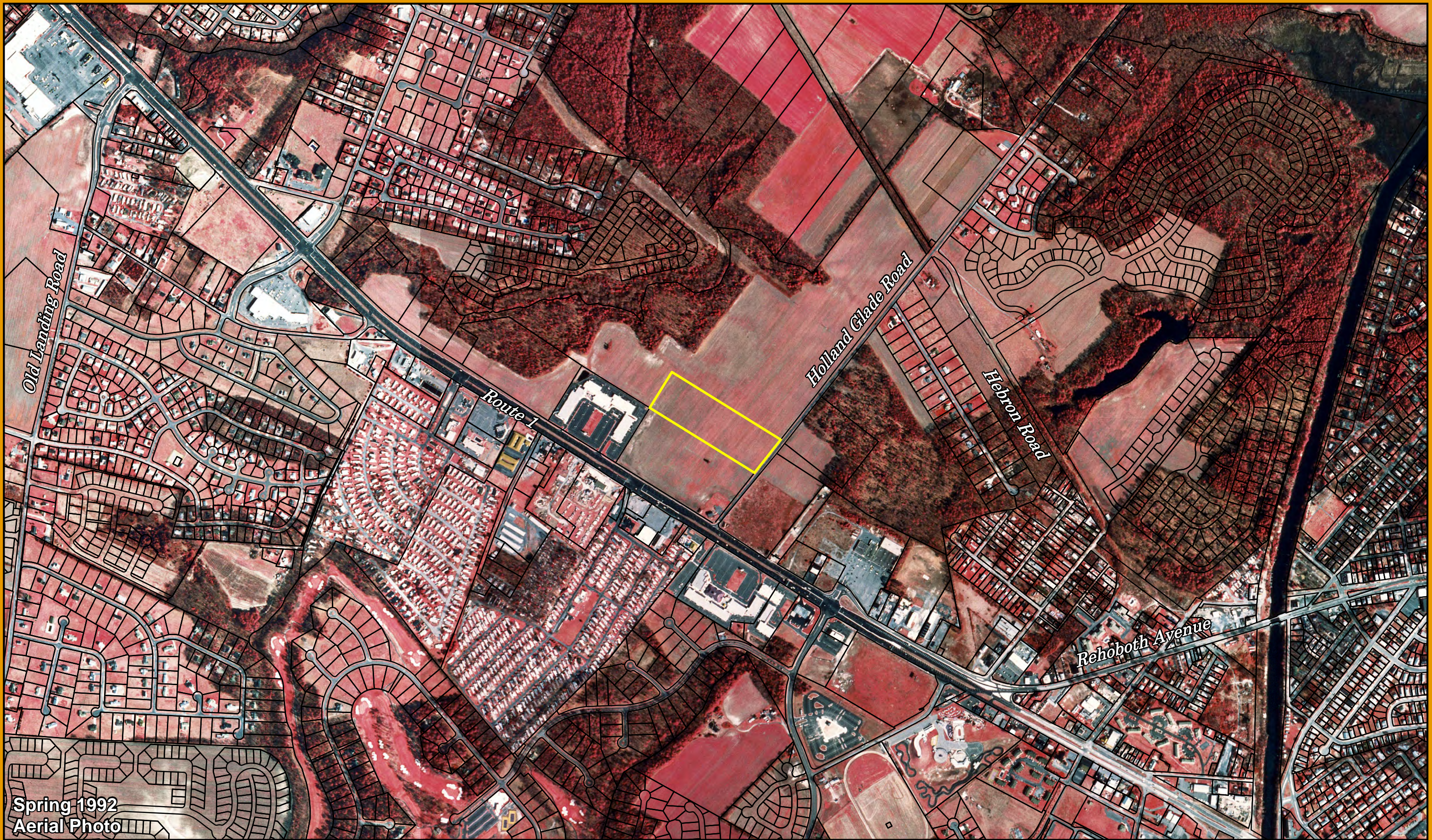


Sussex County Future Land Use
Tanger Outlets - Seaside Rezoning
Sussex County, Delaware





-  Agricultural - AR-1
-  Agricultural - AR-2
-  Medium Residential - MR
-  General Residential - GR
-  High Density Residential - HR2
-  Vacation, Retire, Resident - VRP
-  Neighborhood Business - B-1
-  General Commercial - C-1
-  Commercial Residential - CR-1
-  Marine - M
-  Limited Industrial-LI1
-  Light Industrial - LI-2
-  Heavy Industrial - HI-1



Spring 1992
Aerial Photo

Sources:
Tax Parcels per Sussex County

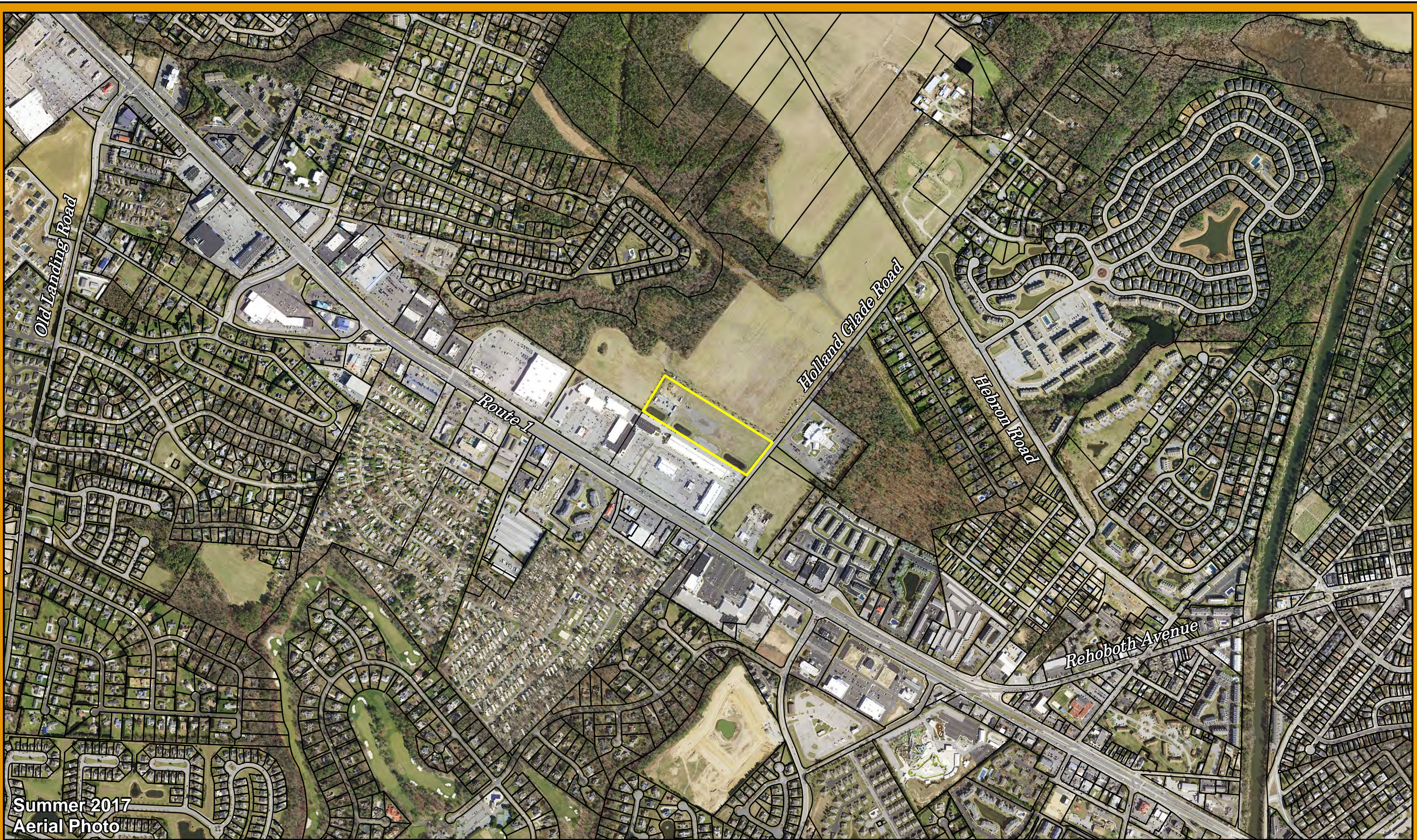


December 2018

1992 Aerial Photo Tanger Outlets - Seaside Rezoning Sussex County, Delaware

0 800 1,600
Feet





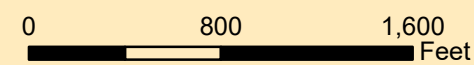
Summer 2017
Aerial Photo

Sources:
Tax Parcels per Sussex County

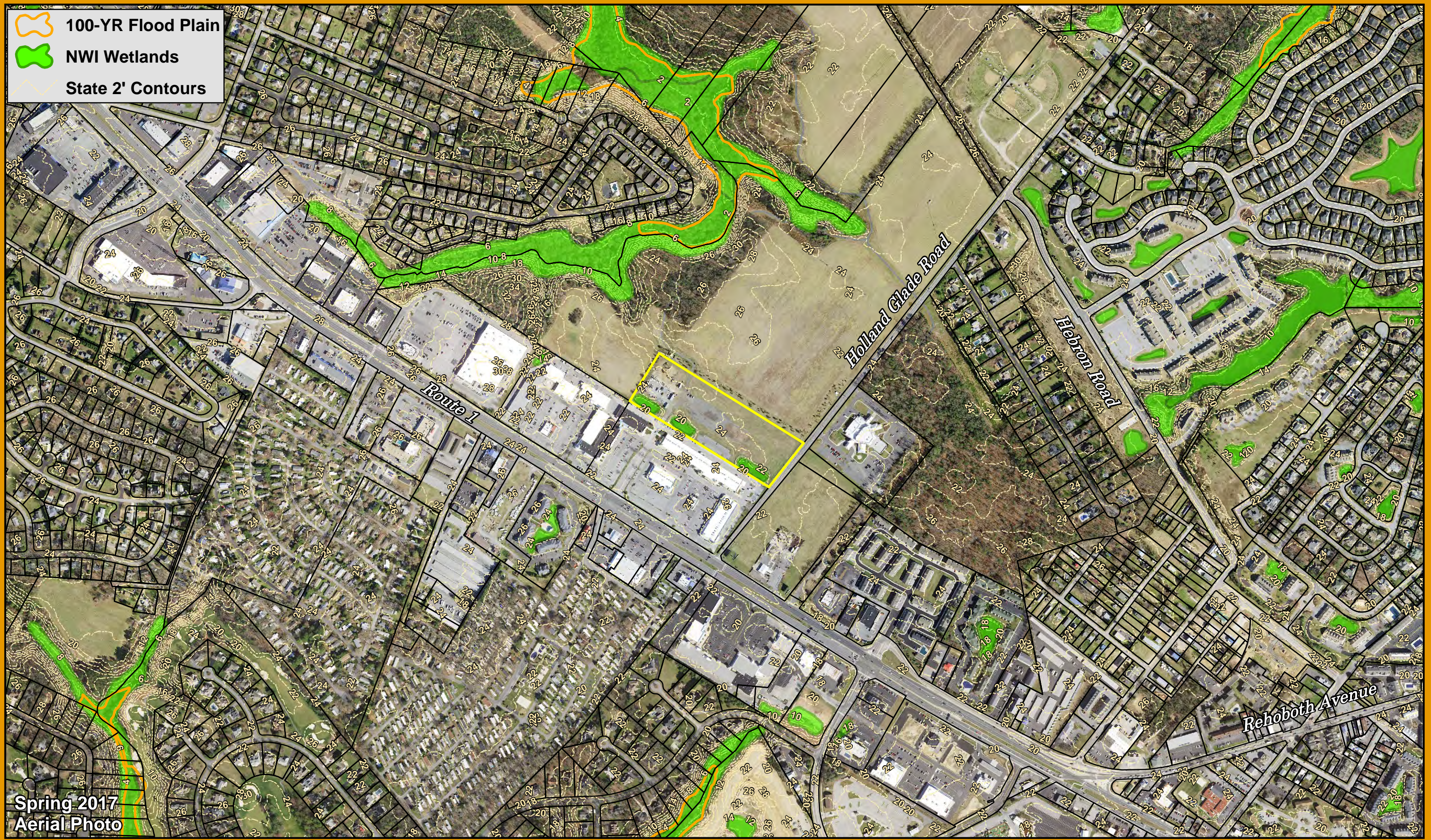


December 2018

2017 Aerial Photo Tanger Outlets - Seaside Rezoning Sussex County, Delaware



-  100-YR Flood Plain
-  NWI Wetlands
-  State 2' Contours



Spring 2017
Aerial Photo

Sources:
Tax Parcels per Sussex County



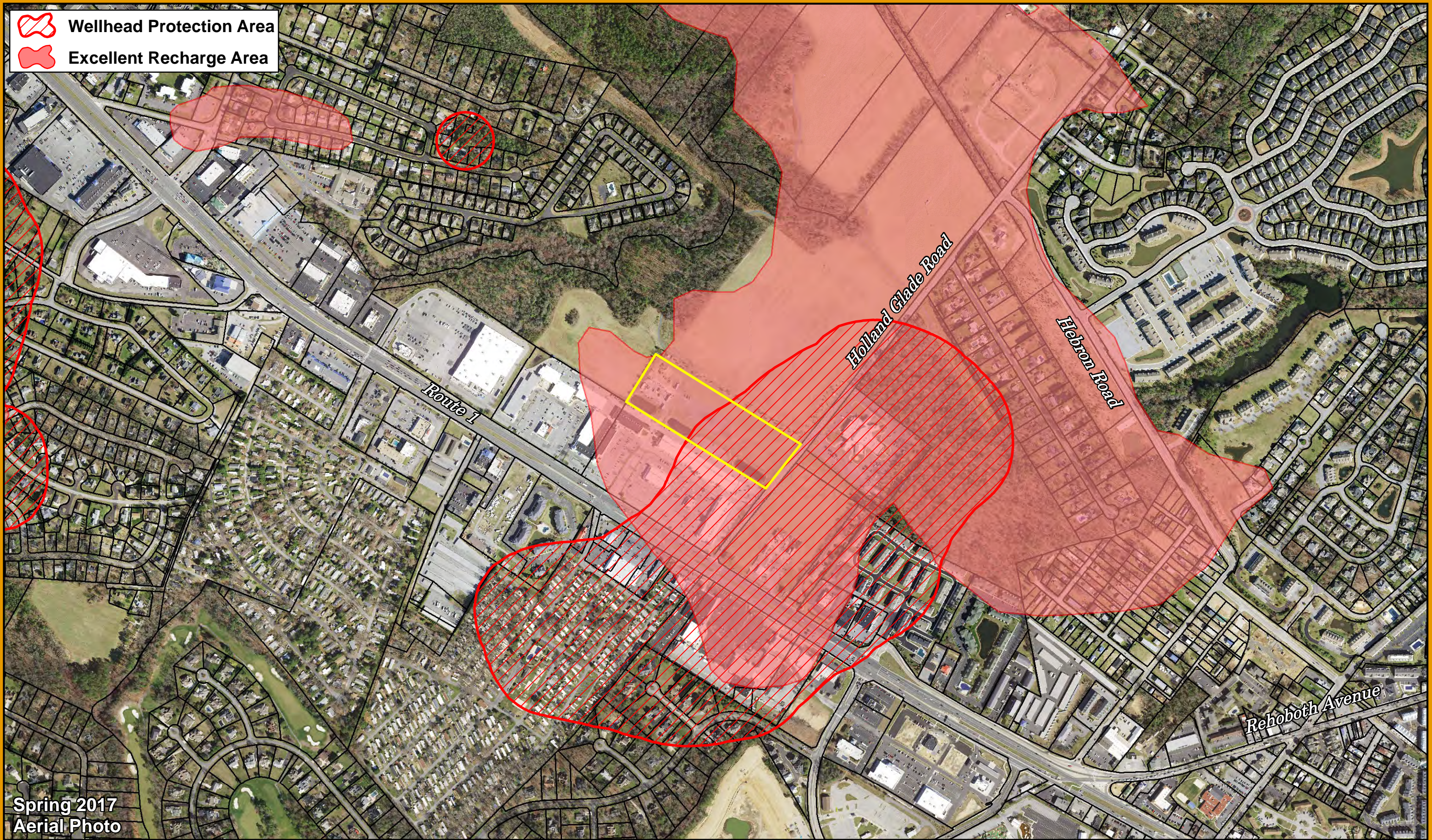
Environmental Map

Tanger Outlets - Seaside Rezoning

Sussex County, Delaware



-  Wellhead Protection Area
-  Excellent Recharge Area



Spring 2017
Aerial Photo

Sources:
Tax Parcels per Sussex County

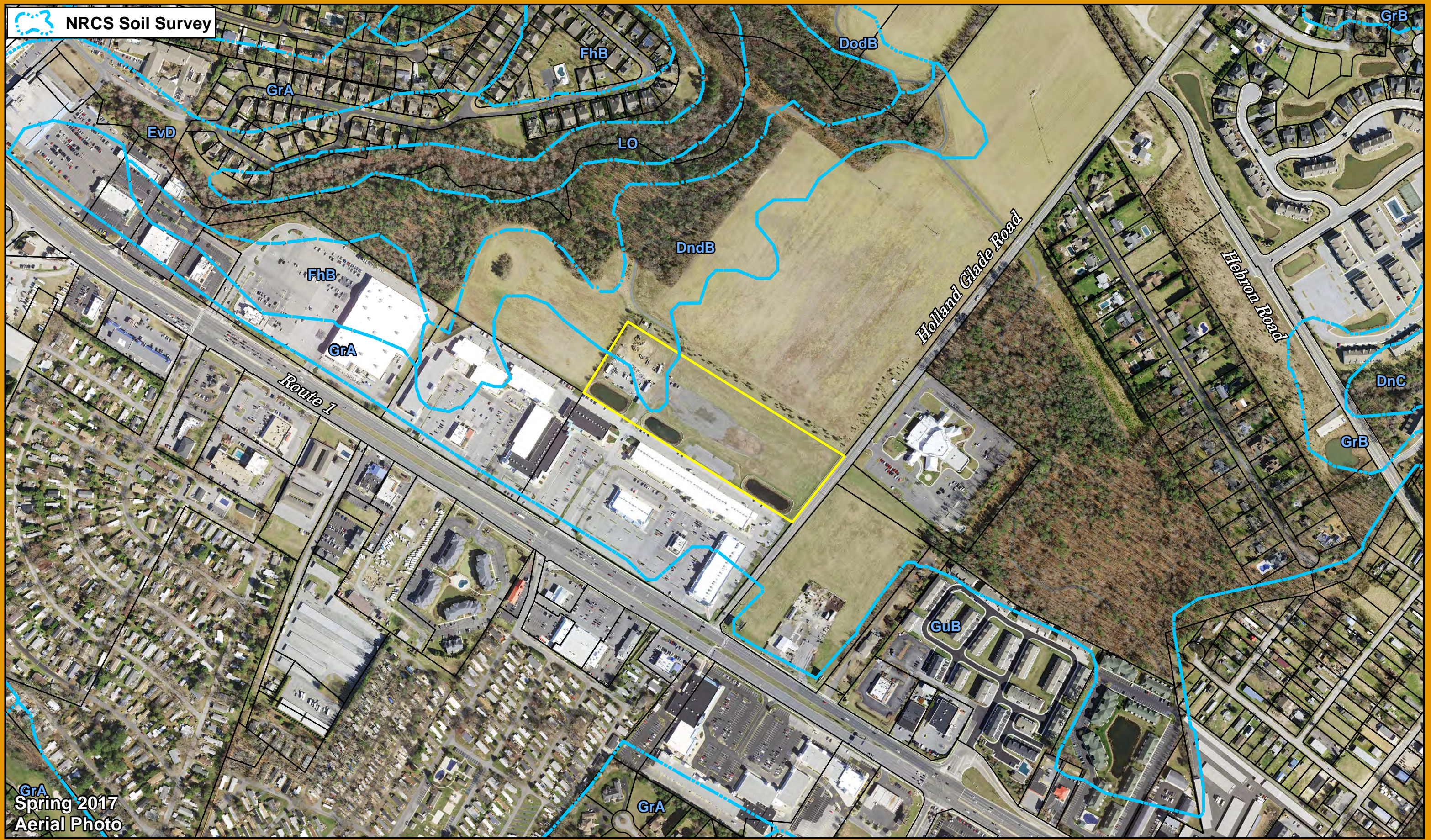
December 2018



Source Water Protection Areas Tanger Outlets - Seaside Rezoning

Sussex County, Delaware





GrA
Spring 2017
Aerial Photo

Lewes Business Directory.

Hotel.

D. D. Murray...Proprietor of Atlantic Hotel.

Merchants.

Wm. P. Orr...Dealer in General Merchandise.
Thos. E. Ricards...
Dodd, Lingo & Burton...
Hitchens & Marshall...Dealers in Grain, Lumber, Lime, Fertilizers and Coal.

Physicians.

David Hall...Physician and Surgeon.
Jos. Lyons...

Residents.

L. L. Lyons...
Jno. P. Marshall...
H. Wolfe...

Farmers.

Harbison Hickman...
N. W. Hickman...
Jno. F. Woods...

Miscellaneous.

Wm. E. Spencer...Real Estate Agent.
Jos. Lafetra...Custom House Officer.
J. S. Burton...Surveyor and Conveyancer.
Wm. M. Hickman...U. S. Assistant Assessor.
Jno. Marshall, Jr...Captain of Schooner "Garnet."
E. D. West...House Carpenter.
Jos. T. Burres...Keeper of Cape Henlopen Lighthouse.

LEWES AND REHOBOTH

Sussex Co.
Scale 1 inch to the Mile.

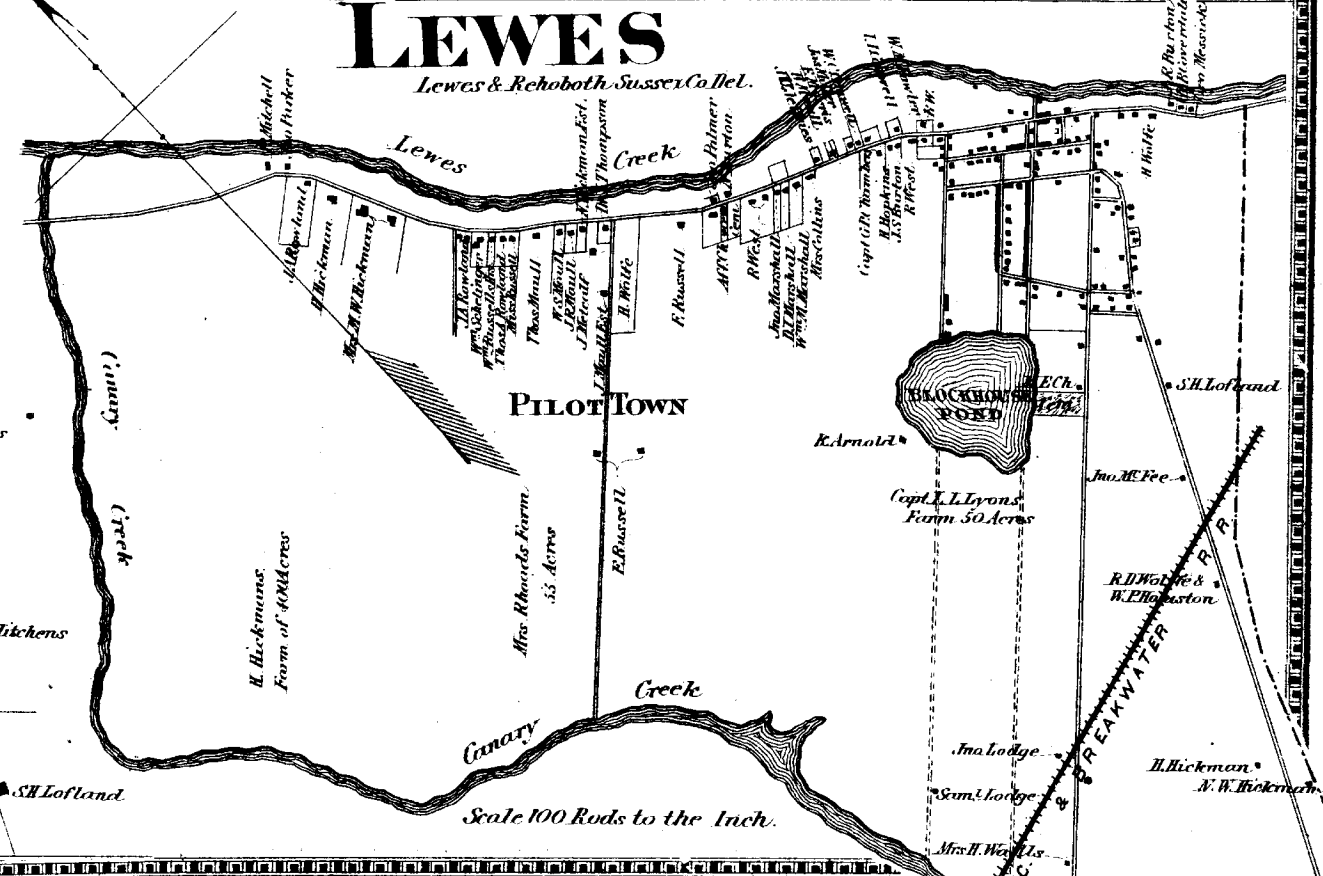
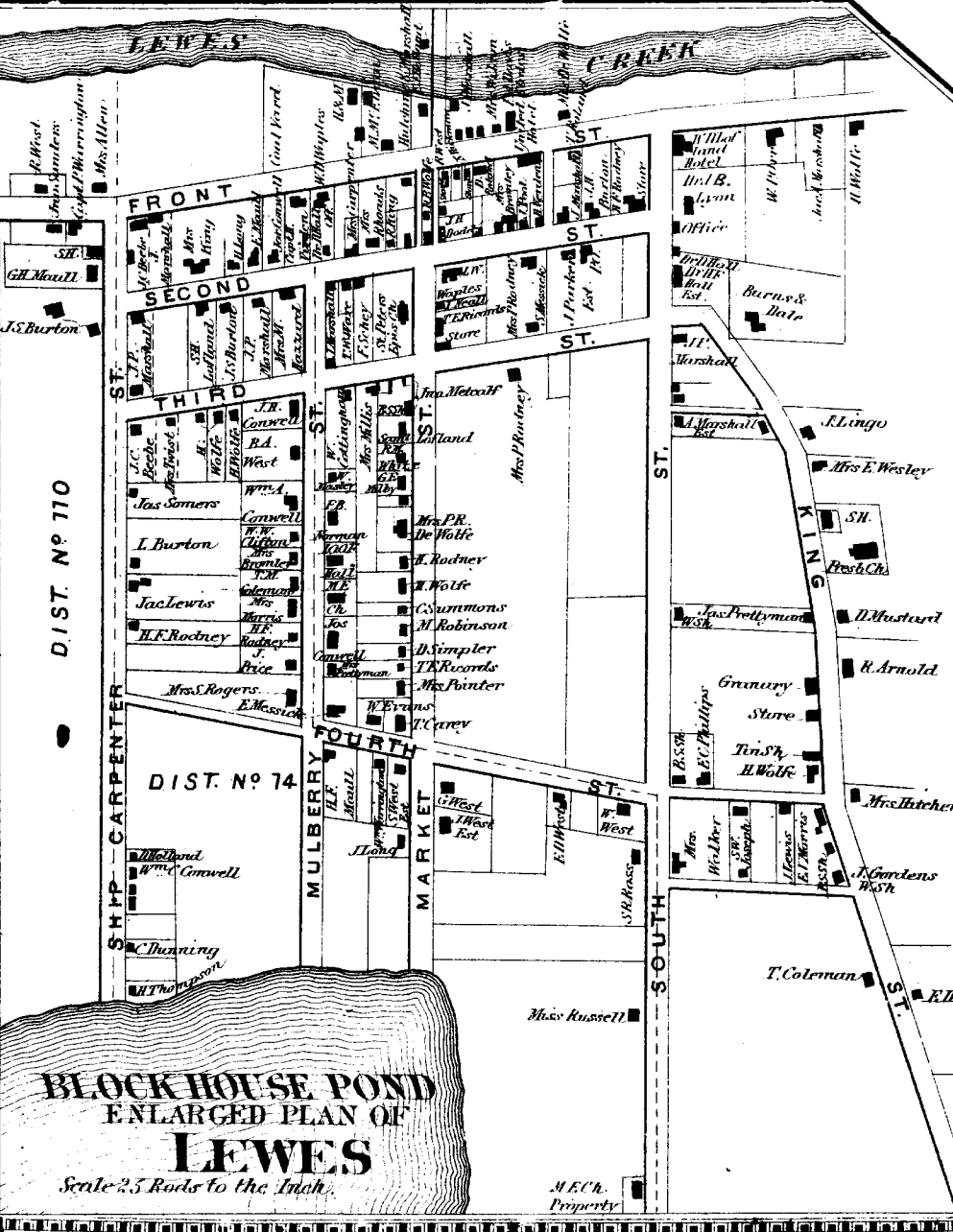
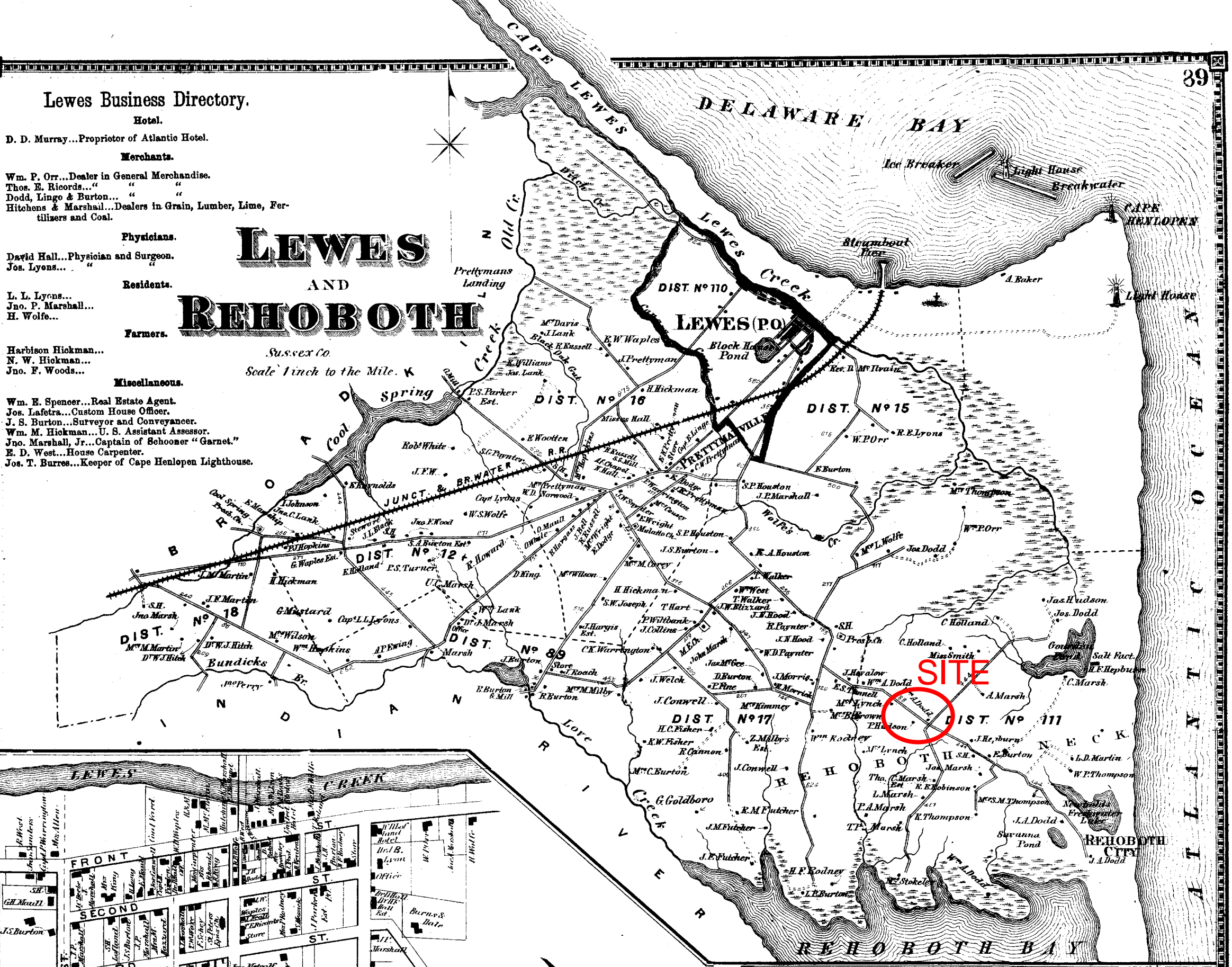


Exhibit 3

January 10, 2019

Michael R. Wigley, AIA, LEED AP
W. Zachary Croucht, P.E.
Michael E. Wheelerton, AIA
Jason P. Loar, P.E.
Ring W. Lardner, P.E.

Sussex County Administrative Building
Planning and Zoning Department
2 The Circle
P.O. Box 589
Georgetown, Delaware 19947

Attn: Ms. Janelle Cornwell, ACIP
Director of Planning

Re: Tanger Outlets - Seaside Rezoning
Tax Parcel No.: 334-13.00-325.26
DBF #1360C001

Dear Ms. Cornwell:

We have read and reviewed the comments provided during the PLUS Review of the Project on August 22, 2018, and received from the Office of State Planning dated September 20, 2018. We offer the following item-by-item response narrative for your review:

Strategies for State Policies and Spending

This project is located in Investment Levels 2 and 3 according to the Strategies for State Policies and Spending. Investment Level 2 reflects areas where growth is anticipated by local, county, and State plans in the near term future. Investment Level 3 reflects areas where growth is anticipated by local, county, and state plans in the longer term future, or areas that may have environmental or other constraints to development. State investments may support future growth in these areas, but please be advised that the State has other priorities for the near future. We encourage you to design the site with respect for the environmental features which are present.

Code Requirements/Agency Permitting Requirements

Department of Transportation – Contact Bill Brockenbrough 760-2109

- *The subject land would have access on Holland Glade Road (Sussex Road 271) either directly or through other lands of the applicant and also on Delaware Route 1 through other lands of the applicant. The site access must be designed in accordance with DelDOT's Development Coordination Manual. A copy of the Manual is available at <http://www.deldot.gov/information/business/subdivisions/changes/index.shtml>. DelDOT will comment further when a plan is available.*
- *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. If the County approves this rezoning, they will revisit the need for a TIS when a site plan is presented.*
- *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 Holland Glade Road. By this regulation, this dedication is to provide a minimum of 30 feet of right-of-way from the physical centerline of the road. 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 Holland Glade 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."*
- *Section 3.5.4.2 of the Manual addresses requirements for shared-use paths and sidewalks. Referring to Section 3.5.4.2.A of the Manual, developments in Level 1 and 2 Areas are required to install a sidewalk or Shared Use Path along their frontage. DelDOT may accept a fee in lieu of construction where a physical impossibility exists but no such impossibility is evident.*
- *In accordance with Section 5.2.9 of the Manual, the Auxiliary Lane Worksheet should be used to determine whether turning lanes are warranted at the site entrance, if a new entrance is proposed and how long the lanes should be at the existing entrances. The worksheet can be found at <http://www.deldot.gov/Business/subdivisions/index.shtml>.*

We have read the above comments and are familiar with the Delaware Department of Transportation's manuals and regulations. We will schedule the appropriate meetings and subsequently prepare a set of documents complying with their regulations.

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

- *The Department of Natural Resources and Environmental Control did not submit comments regarding this application. If the development of this property requires permits from a DNREC section, please contact the DNREC regulatory agency directly.*

Appropriate meetings will be scheduled with the Sussex Conservation District to discuss any future development plans. Permits will be obtained as required.

State Historic Preservation Office – Contact Carlton Hall 736-7404

- *There are no known archaeological sites, or known National Register-listed or eligible properties on the parcel.*
- *If any project or development proceeds, the developer should be aware of the Unmarked Human Burials and Human Skeletal Remains Law. 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.*

Disturbing unmarked graves or burials triggers the Delaware's Unmarked Human Burials and Human Skeletal Remains Law (Del. C. Title 7, Ch. 54). For more information, please review the following websites: www.history.delaware.gov/preservation/umhr.shtml and www.history.delaware.gov/preservation/cemeteries.shtml.

- *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 review process please review the Advisory Council on Historic Preservation's website at: www.achp.gov*

We have read the above comments and are familiar with Delaware's Unmarked Human Burials and Skeletal Remains Law. If federal involvement occurs, we will ensure compliance with the National Historic Preservation Act as described above.

Ms. Janelle Cornwell
Tanger Outlets – PLUS Response
January 10, 2019
Page 4

Recommendations/Additional Information

*This section includes a list of site specific suggestions that are intended to enhance the project. These suggestions have been generated by the State Agencies based on their expertise and subject area knowledge. **These suggestions do not represent State code requirements.** They are offered here in order to provide proactive ideas to help the applicant enhance the site design, and it is hoped (**but in no way required**) that the applicant will open a dialogue with the relevant agencies to discuss how the suggestions can benefit the project.*

Department of Transportation – Contact Bill Brockenbrough 760-2109

- *Presently the subject land provides trailhead parking for a connection to the Junction and Breakwater Trail. If the County approves the rezoning and the applicant develops the property, DelDOT asks that they work with DelDOT's Bicycle and Pedestrian Coordinator, Mr. Anthony Aglio, to maintain a trailhead and a connection to the trail.*
- *DelDOT is interested in exploring the feasibility of a service road, extending northwest from Holland Glade Road parallel to Delaware Route 1 behind the existing outlet shopping center and connecting to the parking lot of the K-mart shopping center. They would like to meet with the applicant to discuss how such a road could be routed through the subject lands.*

We have read the above comments and we will schedule the appropriate meetings to discuss the above requests and their feasibility.

On behalf of the Developer we thank the State for providing us with these comments. Please contact me at (302) 424-1441 if you have any questions or need additional information.

Sincerely,
DAVIS, BOWEN & FRIEDEL, INC.



Ring W. Lardner, P.E.
Principal

P:\Tanger Outlets\Seaside - 10 Acre Expansion\Docs\PLUS\Tanger PLUS response.doc

Cc: James A. Fuqua, Fuqua, Yori & Willard, P.A.
Charles A. Worsham, Coroc / Rehoboth III, LLC

Exhibit 4

January 10, 2019

Michael R. Wigley, AIA, LEED AP
W. Zachary Crouch, P.E.
Michael E. Wheedleton, AIA
Jason P. Loar, P.E.
Ring W. Lardner, P.E.

Sussex County Administrative Building
Planning and Zoning Department
2 The Circle
P.O. Box 589
Georgetown, Delaware 19947

Attn: Ms. Janelle Cornwell
Director of Planning

Re: Tanger Outlets Seaside Rezoning
Environmental Assessment and Public Facility Evaluation Report
Tax Parcel No: 3-34-13.00-325.36
DBF #1360C001.C01

Dear Ms. Cornwell,

On behalf of our client, Coroc / Rehoboth III, LLC, we are submitting an Environmental Assessment and Public Facility Evaluation Report in accordance with §115-194.3. ES-1 Environmentally Sensitive Development District Overlay Zone (ESDDOZ), Subparagraph B (2). We offer the following information that comprises our report:

- (a) *Proposed Drainage design and the effect on stormwater quality and quantity leaving the site, including methods for reducing the amount of phosphorous and nitrogen in the stormwater runoff and the control of any other pollutants such as petroleum hydrocarbons or metals. The proposed improvements will meet or exceed the state regulations for quality and quantity control. The project design will include the use of green technologies to reduce the runoff from the site.*
- (b) *Proposed method of providing potable and, where appropriate, irrigation water and the effect on public or private water systems and groundwater, including an estimate of average and peak demands. The surrounding area is served by Tidewater Utilities, Inc. The eastern half (approximately) of the parcel is located within a wellhead protection area. The project will comply with the County's Source Water Protection Ordinance. At full build-out, the average water use is estimated to be 22,800 gallons per day and a peak use of 68,400 gallons per day.*

- (c) *Proposed means of wastewater treatment and disposal with an analysis of the effect on the quality of groundwater and surface waters, including alternative locations for on-site septic systems.* The proposed project is located within the West Rehoboth Expansion of the Dewey Beach Sanitary Sewer District for Sussex County Sewer. The project is estimated to require seventy-six (76) EDUs. Once a Sewer Concept Plan is approved the parcel may be annexed into the Sussex County Unified Sewer District. The proposed project will be served by the County's sewer system.
- (d) *Analysis of the increase in traffic and the effect on the surrounding roadway system.* A Service Level Evaluation Request response was received from DelDOT by the county on August 10, 2018. Required mitigation measures for the impact the proposed improvements will have on the existing roadway system will be determined by DelDOT during the Entrance plan review stage.
- (e) *The presence of any endangered or threatened species listed on federal or state registers and proposed habitat protection areas.* There are no known endangered or threatened species listed on federal or state registers or proposed habitat protection areas located on the property.
- (f) *The preservation and protection from loss of any tidal or nontidal wetlands on the site.* The project site does not contain tidal or non-tidal wetlands.
- (g) *Provisions for open space as defined in §115-4.* The rezoning application is seeking a C-3 zoning designation which does not have open requirements.
- (h) *A description of provisions for public and private infrastructure.* The Applicant will install all infrastructure at the sole cost to the Applicant. Public infrastructure will include sanitary sewer and drinking water infrastructure and minor roadway improvements within the State of Delaware roadway. All other improvements will be private.
- (i) *Economic, recreational or other benefits.* The proposed project will provide additional commercial options for residents in the neighboring areas that will divert traffic from the Route 1 corridor and provide jobs leading to an economic benefit for the County.
- (j) *The presence of any historic or cultural resources that are listed on the National Register of Historic Places.* The site does not contain any historic or cultural resources that are listed on the National Register of Historic Places.
- (k) *An affirmation that the proposed application and proposed mitigation measures are in conformance with the current Sussex County Comprehensive Plan.* The proposed application and mitigation measures comply with the current Sussex County Comprehensive Plan.

- (l) *Actions to be taken by the applicant to mitigate the detrimental impacts identified relevant to Subsection B(2)(a) through (k) above and the manner by which they are consistent with the Comprehensive Plan. All mitigation measures, where required, have been discussed in their respective section. All mitigation measures as well as the application are consistent with the Comprehensive Plan.*

If you have any questions or need additional information, please do not hesitate to contact me via phone at (302) 424-1441 or via e-mail at rwl@dbfinc.com.

Sincerely,
Davis, Bowen & Friedel, Inc.



Ring W. Lardner, P.E.
Principal

Exhibit 5



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

JENNIFER COHAN
SECRETARY

August 10, 2018

Ms. Janelle Cornwell, Director
Sussex County Planning & Zoning
P.O. Box 417
Georgetown, DE 19947

Dear Ms. Cornwell:

The Department has completed its review of a Service Level Evaluation Request for the **Tanger Outlet Centers** rezoning application, which we received on July 24, 2018. This application is for a 10.00-acre parcel (Tax Parcel: 334-13.00-325.36). The subject land is located on the northwest side of Holland Glade Road (Sussex Road 271), approximately 600 feet northwest of the intersection of Delaware Route 1 and Holland Glade Road. The subject land is currently zoned AR-1 (Agricultural Residential), and the applicant is seeking to rezone the land to C-3 (Heavy Commercial).

Per the 2017 Delaware Vehicle Volume Summary, the annual average and summer average daily traffic volumes along the segment of Holland Glade Road where the subject land is located are 3,255 and 4,283 vehicles per day, respectively.

Our volume-based criteria for requiring a traffic impact study (TIS), addressed in Section 2.2.2.1 of the Development Coordination Manual, are that a development generates more than 500 trips per day or 50 trips during a weekly peak hour. While it seems that the above criteria could be met, we presently cannot predict the site's trip generation with enough accuracy to make a TIS useful. Thus, we recommend that this rezoning application be considered without a TIS and that the need for a TIS be evaluated when a subdivision or land development plan is proposed.

Ms. Janelle M. Cornwell

Page 2 of 2

August 10, 2018

Please contact Mr. Claudy Joinville, at (302) 760-2124, if you have questions concerning this correspondence.

Sincerely,



T. William Brockenbrough, Jr.
County Coordinator
Development Coordination

TWB:cjm

cc: Constance C. Holland, Coordinator, Cabinet Committee on State Planning Issues
Tanger Outlet Centers, Applicant
J. Marc Coté, Assistant Director, Development Coordination
Gemez Norwood, South District Public Works Manager, Maintenance and
Operations
Steven Sisson, Sussex County Subdivision Coordinator, Development Coordination
Derek Sapp, Subdivision Manager, Development Coordination
Brian Yates, Subdivision Manager, Development Coordination
Susanne Laws, Subdivision Manager, Development Coordination
Troy Brestel, Project Engineer, Development Coordination
Claudy Joinville, Project Engineer, Development Coordination

Exhibit 6

01504

02931 206

Tax Parcel Nos.: 3-34-13.00-325.36
3-34-13.00-325.06

Prepared by and return to:
Simpson Thacher & Bartlett LLP
425 Lexington Avenue
New York, New York 10017
Attention: Sasan Mehrara, Esq.

THIS DEED, MADE this 19 day of December, 2003,

BETWEEN R.R. Bayside, Inc., a Delaware corporation, party of the first part,

-and-

COROC/Rehoboth III L.L.C., a Delaware limited liability company, party of the second part,

WITNESSETH, That the said party of the first part, for and in consideration of the sum of TEN AND 00/100 DOLLARS (\$10.00), lawful money of the United States of America, and other good and valuable consideration, the receipt whereof is hereby acknowledged, hereby grants and conveys unto the said party of the second part, its successors and assigns, described on Exhibit A hereto which is made a part hereof by this reference

SUBJECT to all restrictions, easement and agreements of record.

Consideration: \$22720711 Exempt Code: A

County	State	Total
340810.66	340810.66	681621.32
counter	Date: 01/08/2004	

SD Kich

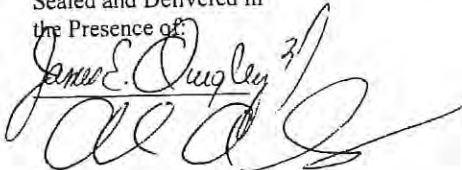
GRANTEE(S) ADDRESS:

COROC/Rehoboth III, L.L.C.
C/o Blackstone Real Estate Acquisitions IV L.L.C.
345 Park Avenue
New York, NY 10154

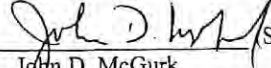
[No further text on this page; signature page follows]


IN WITNESS WHEREOF, the said R.R. Bayside, Inc., hath caused its name by John D. McGurk its President to be hereunto set, and the common and corporate seal of the said corporation to be hereunto affixed, duly attested by its Secretary, the day and the year above written.

Sealed and Delivered in
the Presence of:


[CORPORATE SEAL]

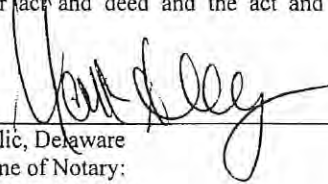
R.R. Bayside, Inc., a Delaware corporation

BY:  (SEAL)
John D. McGurk
President

ATTEST:  (SEAL)
James E. Quigley, 3rd
Secretary

STATE OF New York)
) SS
COUNTY OF New York)

BE IT REMEMBERED, that on this 19 day in the year of our Lord, two thousand three (2003), personally came before me, the Subscriber, a Notary Public for the State of Delaware, John D. McGurk President of R.R. Bayside, Inc., a corporation existing under the laws of the State of Delaware, the party to this Indenture, known to me personally to be such, and acknowledged this Indenture to be his/her act and deed and the act and deed of said corporation.



Notary Public, Delaware
Printed Name of Notary:
Date Commission expires: _____

[Notary Seal]

MARK W. ARVEY
Notary Public, State of New York
Commission Expires 12/31/06

Exhibit 7

LEGAL DESCRIPTION

COROC/REHOBOTH III, LLC

TAX PARCEL 3-34-13.00-325.36

August 15, 2018

BEING all that piece or parcel of land, hereinafter described, situate, lying and being located in Lewes and Rehoboth Hundred, Sussex County, Delaware; being Lot 18 as shown on a plot entitled, "Boundary Survey Plan of the lands of COROC/Rehoboth III, LLC" prepared by Davis, Bowen & Friedel, Inc., dated August 2018; said piece or parcel of land being more particularly described as follows:

BEGINNING at a point on the northwesterly right-of-way line of Holland Glade Road (SCR 271), said beginning point being formed by the intersection of said northwesterly right-of-way line of Holland Glade Road with the northeasterly line of, now or formerly, COROC/Rehoboth III, LLC, as recorded in the Office of the Recorder of Deeds in and for Sussex County and the State of Delaware in Deed Book 2931, Page 206; said beginning point also being coordinated on the Delaware State Coordinate System at North: 261,675.408 feet, East: 743,842.516 feet; thence,

1) leaving said Holland Glade Road and running by and with said COCOR/Rehoboth III, LLC lands, North 58 degrees 12 minutes 43 seconds West 1,119.81 feet to an iron pipe found at a point on the southwesterly line of the lands of, now or formerly, State of Delaware, as recorded in said Office of the Recorder of Deeds in Deed Book 2408, Page 189, thence,

2) leaving said COCOR/Rehoboth III, LLC lands and running by and with said State of Delaware lands, the following two courses and distances, North 31 degrees 47 minutes 16 seconds East 381.50 feet to a point, thence running,

3) South 58 degrees 12 minutes 44 seconds West 1,163.98 feet to an iron pipe found at a point on said northwesterly right-of-way line of Holland Glade Road, thence,

4) leaving said State of Delaware lands and running by and with said Holland Glade Road South 38 degrees 23 minutes 29 seconds West 384.05 feet to the point and place of beginning; **CONTAINING** 10.001 acres of land, more or less.

Exhibit 8

Planning & Zoning Commission 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)

Conditional Use

Zoning Map Amendment

Site Address of Conditional Use/Zoning Map Amendment

NW side of Holland Glade Road (SCR 271), approximately 500' from the intersection with SR-1.

Type of Conditional Use Requested:

Tax Map #: 334-13.00-325.36 Size of Parcel(s): 10 +/- acres

Current Zoning: AR-1 Proposed Zoning: C-3 Size of Building: _____

Land Use Classification: Commercial

Water Provider: City of Rehoboth Sewer Provider: Sussex County

Applicant Information

Applicant Name: Coroc/Rehoboth III, LLC

Applicant Address: 3200 Northline Ave #360

City: Greensboro State: NC Zip Code: 27408

Phone #: (251) 747-8383 E-mail: Charles.Worsham@tangeroutlets.com

Owner Information

Owner Name: Coroc/Rehoboth III, LLC

Owner Address: 3200 Northline Ave #360

City: Greensboro State: NC Zip Code: 27408

Phone #: (251) 747-8383 E-mail: Charles.Worsham@tangeroutlets.com

Agent/Attorney/Engineer Information

Agent/Attorney/Engineer Name: Davis, Bowen & Friedel, Inc.

Agent/Attorney/Engineer Address: 1 Park Ave

City: Milford State: DE Zip Code: 19963

Phone #: (302) 424-1441 E-mail: rwl@dbfinc.com



Check List for Sussex County Planning & Zoning Applications

The following shall be submitted with the application

- Completed Application
- Provide eight (8) copies of the Site Plan or Survey of the property
 - Survey shall show the location of existing or proposed building(s), building setbacks, parking area, proposed entrance location, etc.
 - Provide a PDF of Plans (may be e-mailed to a staff member)
 - Deed or Legal description
- Provide Fee \$500.00
- Optional - Additional information for the Commission/Council to consider (ex. architectural elevations, photos, exhibit books, etc.) If provided submit 8 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.
- DeIDOT Service Level Evaluation Request Response
- PLUS Response Letter (if required) *REVIEWED ON 8/22/2018*

*To BE SUBMITTED
LATER*

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 the Sussex County Council 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

[Signature]
 P & Z, BOWEN & FRISVOLD, INC

Date: 8/31/2018

Signature of Owner

[Signature]

Date: 8-17-18

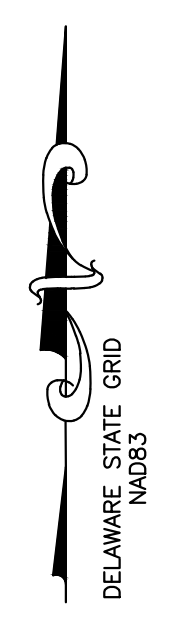
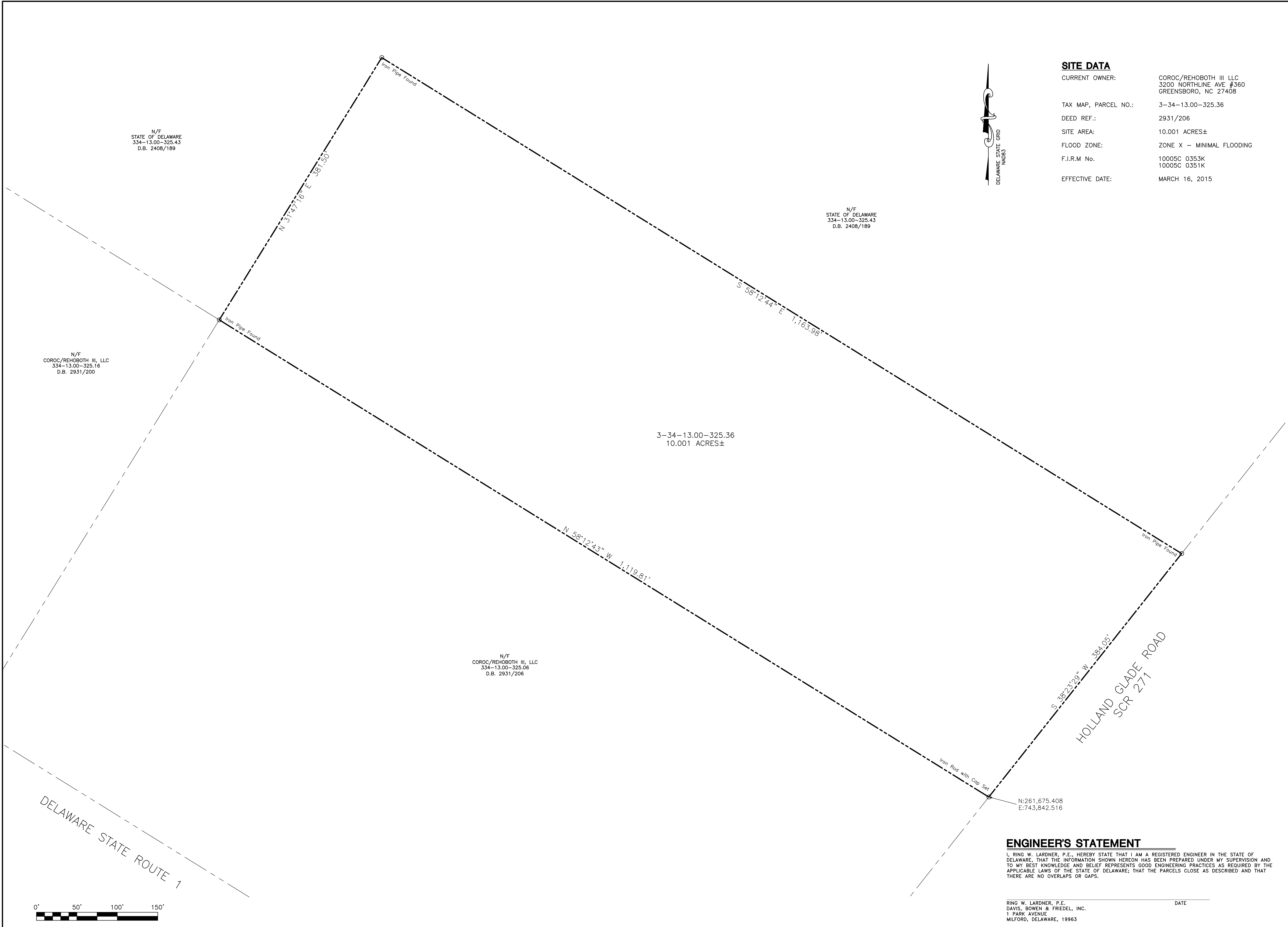
For office use only:

Date Submitted: _____ Fee: \$500.00 Check #: _____
 Staff accepting application: _____ Application & Case #: _____
 Location of property: _____

Subdivision: _____
 Date of PC Hearing: _____ Recommendation of PC Commission: _____
 Date of CC Hearing: _____ Decision of CC: _____

Exhibit 9

S:\1360\1360C001 - Tangier\Boundary.dwg, Aug 29, 2018 - 1:41pm



SITE DATA

CURRENT OWNER: COROC/REHOBOTH III LLC
 3200 NORTHLINE AVE #360
 GREENSBORO, NC 27408

TAX MAP, PARCEL NO.: 3-34-13.00-325.36

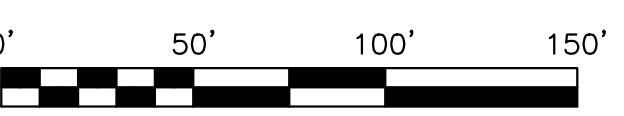
DEED REF.: 2931/206

SITE AREA: 10.001 ACRES±

FLOOD ZONE: ZONE X - MINIMAL FLOODING

F.I.R.M No. 10005C 0353K
 10005C 0351K

EFFECTIVE DATE: MARCH 16, 2015



ENGINEER'S STATEMENT

I, RING W. LARDNER, P.E., HEREBY STATE THAT I AM A REGISTERED ENGINEER IN THE STATE OF DELAWARE, THAT THE INFORMATION SHOWN HEREON HAS BEEN PREPARED UNDER MY SUPERVISION AND TO MY BEST KNOWLEDGE AND BELIEF REPRESENTS GOOD ENGINEERING PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE; THAT THE PARCELS CLOSE AS DESCRIBED AND THAT THERE ARE NO OVERLAPS OR GAPS.

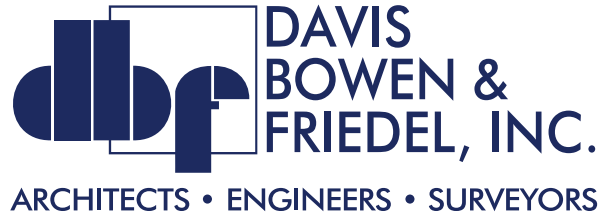
RING W. LARDNER, P.E. _____ DATE _____
 DAVIS, BOWEN & FRIEDEL, INC.
 1 PARK AVENUE
 MILFORD, DELAWARE, 19963

ARCHITECTS ENGINEERS SURVEYORS
DAVIS, BOWEN & FRIEDEL, INC.
 SAUSBURY, MARYLAND (410) 543-9091
 MILFORD, DELAWARE (302) 424-1441

BOUNDARY SURVEY PLAN
of the Lands of
COROC/ REHOBOTH III, LLC
 LEVES & REHOBOTH HUNDRED
 SUSSEX COUNTY, DELAWARE

Revisions:

Date: **AUGUST 2018**
 Scale: **1"=50'**
 Dwn.By: **EWT**
 Proj.No.: **1360C001**
 Dwg.No.:



*IMPROVING OUR COMMUNITIES.
SHAPING THE WORLD AROUND US.
CREATING VALUE BY DESIGN.*

601 East Main Street, Suite 100
Salisbury, MD 21804
(410) 543-9091

1 Park Avenue
Milford, DE 19963
(302) 424-1441

106 Washington Street, Suite 103
Easton, MD 21601
(410) 770-4744

www.dbfinc.com

PLANNING & ZONING

JAMIE WHITEHOUSE
PLANNING & ZONING MANAGER

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



Sussex County

DELAWARE
sussexcountyde.gov

Memorandum

To: Sussex County Planning Commission Members
From: Jamie Whitehouse, Planning and Zoning Manager; Lauren DeVore, Planner III; Samantha Bulkilvish, Planner I and Jenny Norwood, Planner I
CC: Vince Robertson, Assistant County Attorney
Date: January 18, 2019
RE: Other Business for January 24, 2019 Planning Commission Meeting

This memo is to provide background for the Planning Commission to consider as a part of the Other Business to be reviewed during the January 24, 2019 Planning Commission meeting.

2018-14 Lands of Shockley

KH

Final Subdivision Plan

This is a Final Subdivision Plan for the creation of one lot from a larger parcel measuring 57.7 acres +/- at the end of an existing road, Edgewood Avenue, within the Sussex Estates Subdivision. While this new parcel will not be a part of the Sussex Estates Subdivision it will have access via Edgewood Avenue. Staff are in receipt of all agency approvals. Zoning: AR-1 (Agricultural Residential District). Tax Parcel: 232-6.00-63.00.

Canal Corkran, LLC. (CZ 1852)

KS

Final Site Plan

This is a Final Subdivision Plan for the creation of eight lots out of two lots that are part of the Canal Corkran Subdivision. On July 26, 2018 Planning Commission voted to recommend approval of the Change of Zone application. On August 14, 2018 County Council voted to approve Change of Zone 1852 with the addition of two conditions for the new lots regarding the wetlands contained on the new parcels. Staff are in receipt of all agency approvals. Zoning: MR (Medium Residential District). Tax Parcels: 334-13.00-1318.00, 1319.00 and 1320.00.

2017-03 Majestic Meadows (FKA River Rock Glen)

KS

Revised Subdivision Plan

This is a Revised Subdivision Plan for a 26 single-family lot subdivision. On July 12, 2018 the Commission granted Revised Subdivision Plan approval for this subdivision, showing the removal of the sidewalk on one side of the street. The layout of the stormwater management areas, and the layout of Lot #19 has since been revised to address comments from Sussex Conservation District. The Revised Subdivision Plan complies with the Zoning and Subdivision Codes and all conditions of approval. Staff are in receipt of all required agency approvals in relation to the changes. Tax District is AR-1 (Agricultural Residential Zoning District). Tax Parcel: 235-22.00-19.00.

2004-17 The Villages at Red Mill Pond South

HW

Revised Subdivision Plan



This is a Revised Final Subdivision Plan for the Villages at Red Mill Pond South. The plan was originally approved by the Planning & Zoning Commission on March 20, 2018. The Record Plan is being revised to reflect the addition of a landscape plan and updated entrance. When the utility provider was expanding along Route 9, a utility pole was placed in the location of where the proposed entrance would be, and the plans had to be subsequently amended. The plan complies with the Zoning and Subdivision Code and all Conditions of Approval. Staff are in receipt of all agency approvals. Zoning: AR-1 (Agricultural Residential District). Tax Parcel: 334-5.00-170.00.

S-18-39 Route 24 CJ, LLC/Colonial Oaks, LLC

KS

Revised Site Plan

This is a Revised Site Plan for a 104-room Hotel to be located on John J. Williams Highway. The footprint of the hotel has been revised with the addition of deluxe rooms forcing the building, adjacent lot lines and parking east on the site to maintain the fire lane on the west side of the building. A note has also been added and the parking in the front is shown so that the parking would be provided when deemed necessary by the owner. An additional entrance has also been added off Route 24. The previous site plan had been given preliminary approval by Planning Commission on May 10, 2018 with Final by Staff subject to the receipt of all agency approvals. Zoning: C-1 (General Commercial District). Tax Parcels: 334-12.00-57.03, 57.07 & 57.08. Staff are awaiting agency approvals.

S-18-71 Baywood Garden Villas

KS

Preliminary Site Plan

This is a Preliminary Site Plan for a 209-unit multi-family development located on a 17.48 ac parcel accessed from Long Neck Road (Rt. 23), for a density of 11.96 DU/AC. The site plan is for Phase 1 of a larger development, with a future phase shown as being located to the north of the 209 units proposed. The site plan shows the 209 units split into 10 separate buildings with a total number of 406 parking spaces shown to be provided, with 35 of the parking spaces being contained within single-story garage structures. The Preliminary Site Plan complies with the Zoning Code. The Zoning District is C-1 (General Commercial). Tax Parcels: 234-23.00-273.05, 270.00 (part of).

S-18-88 Beebe Healthcare - Rehoboth

KS

Preliminary Site Plan

This is a Preliminary Site Plan for a four-story, 135,000 sf. surgical hospital with parking and other site improvements located off Warrington Road. Zoning: I-1 (Institutional District). The Preliminary Site Plan complies with the Zoning Code. Tax Parcel: 334-12.00-125.00. Staff are awaiting agency approvals.

S-18-90 Cellco DOV Hollyville

KH

Preliminary Site Plan

This is a Preliminary Site Plan for the construction of a 151' monopole cell tower and a 50'x 60' fenced in telecommunications compound located at 22602 Harbeson Rd. A Special Use Exception (12201) was granted for the use and structure at their meeting on September 17, 2018. The site will access the facility through an existing entrance located on Tax Parcel 234-10.00-70.07. The Preliminary Site Plan complies with all zoning requirements. Tax Parcel: 234-10.00-70.06 & 234-10.00-70.07. Zoning: C-1 (General Commercial Zoning District).

DATA COLUMN:

T.M.#2-32-6.00-63.00
 ZONING: AR-1
 SETBACKS:
 FRONT: 30'
 SIDE: 15'
 REAR: 20'
 TRACT AREA: 57.7 ACRES± (INCLUDING RESIDUAL AREA)
 EXISTING LOTS: 1
 PROPOSED LOTS: 1 NEW (2 TOTAL INCLUDING RESIDUAL LANDS)
 PRESENT USE: AGRICULTURAL
 PROPOSED USE: RESIDENTIAL
 ACCESS: EDGEWOOD AVENUE (PRIVATE ROAD) TO SCR 467
 ROADWAY CLASSIFICATION: SCR 467 LOCAL ROADWAY
 WATER AND SEWER: INDIVIDUAL ON-SITE
 100 YEAR FLOODPLAIN: SITE IS NOT IMPACTED
 AS PER FIRM #10005C0410K DATED 3/16/15
 THIS PROJECT IS NOT IN THE PROXIMITY OF A TID
 SPEED LIMIT ON TAYLOR MILL RD. IS 50MPH (UNPOSTED)

NOTES:

- IF THE RESIDUAL LANDS OF THE APPLICANT ARE EVER DEVELOPED INTO A MAJOR SUBDIVISION, THEN THE ACCESS TO THE PARCELS CREATED BY THIS MINOR SUBDIVISION PLAN MAY BE REVISED TO BE FROM AN INTERNAL SUBDIVISION STREET.
- ALL ENTRANCES SHALL CONFORM TO THE DELAWARE DEPARTMENT OF TRANSPORTATION'S (DEL.D.O.T.'S) CURRENT DEVELOPMENT COORDINATION MANUAL AND SHALL BE SUBJECT TO ITS APPROVAL.
- THERE IS A FIFTY FOOT BUILDING SETBACK FROM LANDS USED FOR AGRICULTURAL PURPOSES.
- 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.
- IF EXISTING ENTRANCES ARE ALTERED, THEY SHALL CONFORM TO DELDOT'S DEVELOPMENT COORDINATION MANUAL (DCM) AND SHALL BE SUBJECT TO ITS APPROVAL. NO CONSTRUCTION SHALL OCCUR IN THE RIGHT-OF-WAY (ROW) WITHOUT A DELDOT PERMIT.
- PERPETUAL MAINTENANCE OF EDGEWOOD AVENUE A 50' PRIVATE ROAD, SHALL BE THE EQUAL RESPONSIBILITY OF THE PROPERTY OWNERS THAT THE ROAD SERVES.
- PARCEL "A" SHALL HAVE ACCESS TO SCR 467 VIA EDGEWOOD AVENUE AS SHOWN.
- THERE SHALL BE NO FURTHER LOTS CREATED OFF EDGEWOOD AVENUE.

OTHER LANDS OF
 DENNIS L. & SHARON K. SHOCKLEY
 T.M. 2-32-6.00-63.00
 RESIDUE AREA: 56.7 ACRES ±
 ZONED AR-1

WILLIAM D. & SHARON M. DOLBY
 NF D.B. 1504-27
 T.M. 2-32-6.00-63.03
 ZONED AR-1

BARRY W. & TAYLOR L. COOPER
 NF D.B. 1911-311
 T.M. 2-32-6.00-63.02

OTHER LANDS OF
 DENNIS L. & SHARON K. SHOCKLEY
 T.M. 2-32-6.00-63.00
 RESIDUE AREA: 56.7 ACRES ±
 ZONED AR-1

APPROVED BY:

Samantha Bullibrich
 CHAIRMAN OR SECRETARY OF PLANNING COMM.

1/3/19
 DATE

Arnold Hunt
 PRESIDENT OF COUNTY COUNCIL

1-3-19
 DATE

I, STEPHEN M. SELLERS REGISTERED AS A PROFESSIONAL LAND SURVEYOR IN THE STATE OF DELAWARE, HEREBY STATE THAT THE INFORMATION SHOWN ON THIS PLAN HAS BEEN PREPARED UNDER MY SUPERVISION AND MEETS THE STANDARDS OF PRACTICE AS ESTABLISHED BY THE STATE OF DELAWARE BOARD OF PROFESSIONAL LAND SURVEYORS. ANY CHANGES TO THE PROPERTY CONDITIONS, IMPROVEMENTS, BOUNDARY OR PROPERTY CORNERS AFTER THE DATE SHOWN HEREON SHALL NECESSITATE A NEW REVIEW AND CERTIFICATION FOR ANY OFFICIAL OR LEGAL USE.

Stephen M. Sellers
 STEPHEN M. SELLERS, PLS 566

12/4/18
 DATE

SIGHT DISTANCE NOTE:

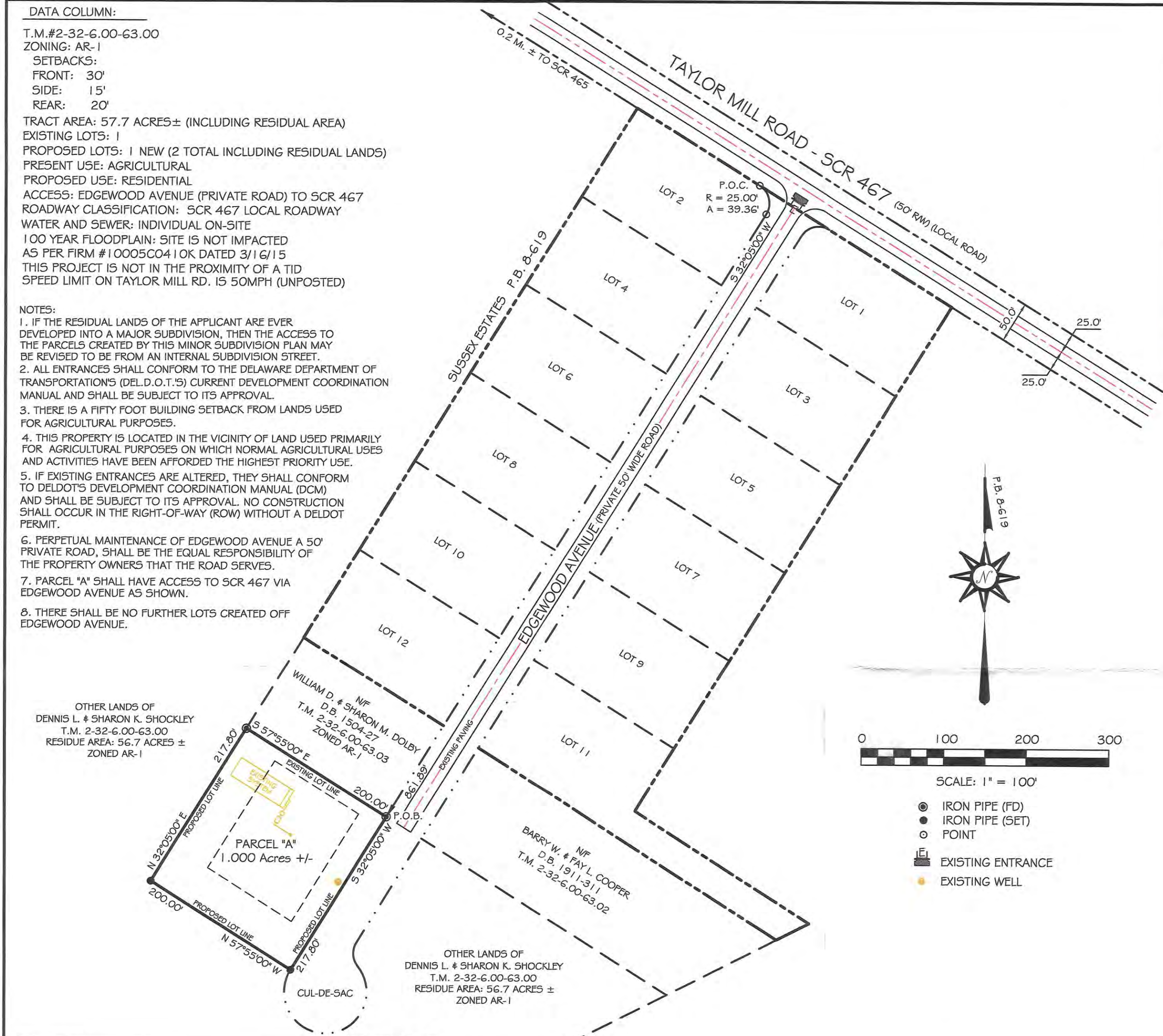
NOTE: SHRUBBERY, PLANTINGS, SIGNS AND/OR OTHER VISUAL BARRIERS THAT COULD OBSTRUCT THE SIGHT DISTANCE OF A DRIVER PREPARING TO ENTER THE ROADWAY ARE PROHIBITED WITHIN THE DEFINED DEPARTURE SIGHT TRIANGLE AREA ESTABLISHED ON THIS PLAN. IF THE ESTABLISHED DEPARTURE SIGHT TRIANGLE AREA IS OUTSIDE THE RIGHT-OF-WAY OR PROJECTS ONTO AN ADJACENT PROPERTY OWNERS LAND, A SIGHT EASEMENT SHOULD BE ESTABLISHED AND RECORDED WITH ALL AFFECTED PROPERTY OWNERS TO MAINTAIN THE REQUIRED SIGHT DISTANCE.

FIRE MARSHAL NOTES:

- ALL FIRE LANES, FIRE HYDRANTS AND FIRE DEPARTMENT CONNECTION SHALL BE MARKED IN ACCORDANCE WITH THE DELAWARE STATE FIRE PREVENTION REGULATIONS.
- MAXIMUM HEIGHT: 3 STORIES NOT TO EXCEED 42'.
- A SINGLE FAMILY DWELLING IS PROPOSED.
- BUILDING CONSTRUCTION TYPE: NFFA TYPE V WOOD FRAME.
- THIS IS NOT A GATED COMMUNITY.
- AUTOMATIC FIRE SPRINKLERS ARE NOT PROPOSED FOR THIS STRUCTURE.

OTHER THAN SHOWN, THIS SURVEY AND PLAN DOES NOT VERIFY THE EXISTENCE OR NON-EXISTENCE OF RIGHTS-OF-WAY OR EASEMENTS CROSSING THIS PROPERTY.
 NO TITLE SEARCH PROVIDED OR STIPULATED.
 SURVEY CLASS: SUBURBAN

DATE	REVISION
11-05-18	COUNTY COMMENTS
12-05-18	FIRE MARSHAL COMMENTS



DENNIS

OWNER: DENNIS L. & SHARON K. SHOCKLEY
 28636 DISCOUNT
 LAUREL, DE. 199

MILNER LEWIS
 LAND SURVEYING
 1560 MIDDLEFORD RD.
 SEAFORD, DELAWARE 199
 PH: 302-629-9895 FAX: 302-629-9896

CANAL CORKRAN EXPANSION

LEWES AND REHOBOTH HUNDRED

SUSSEX COUNTY, DELAWARE

CANAL CROSSING ROAD (MAINT. #304631)

LOCAL/SUBURBAN ROAD

RECORD PLAN

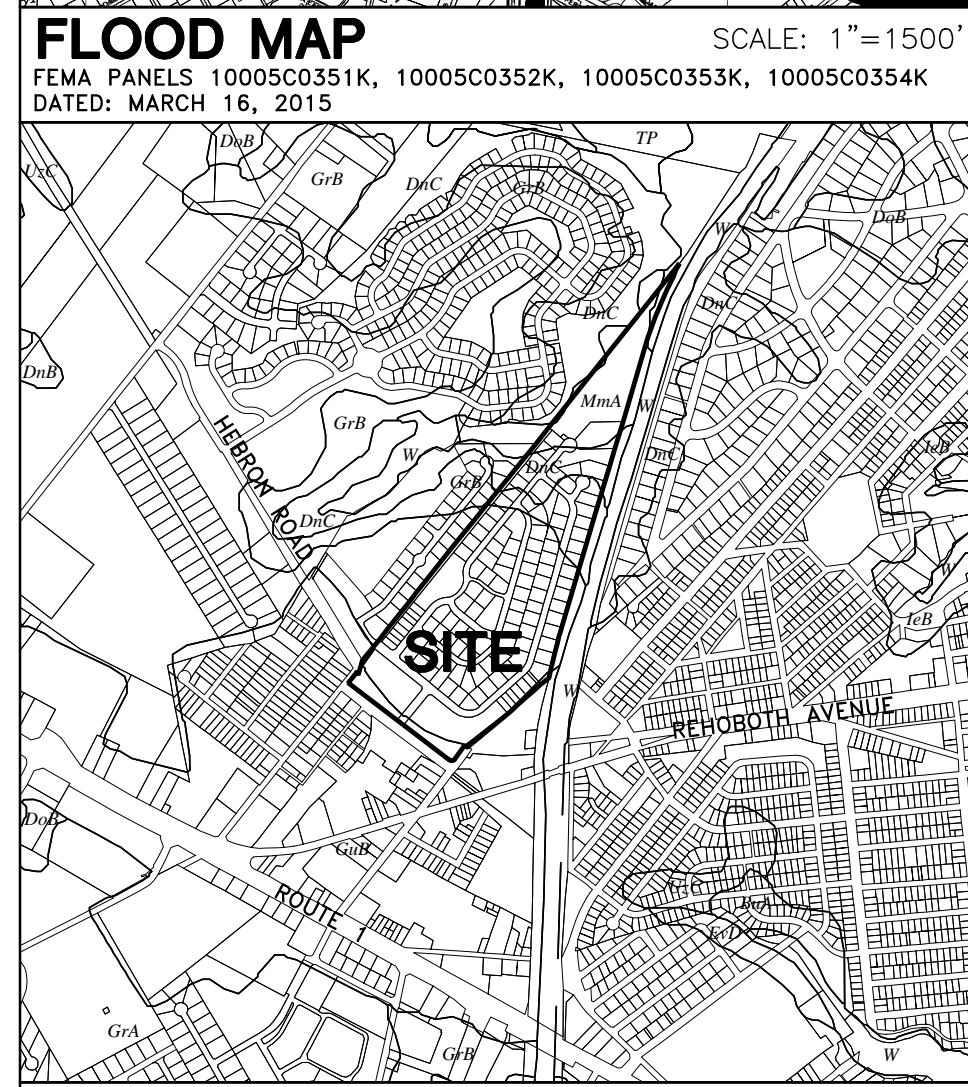
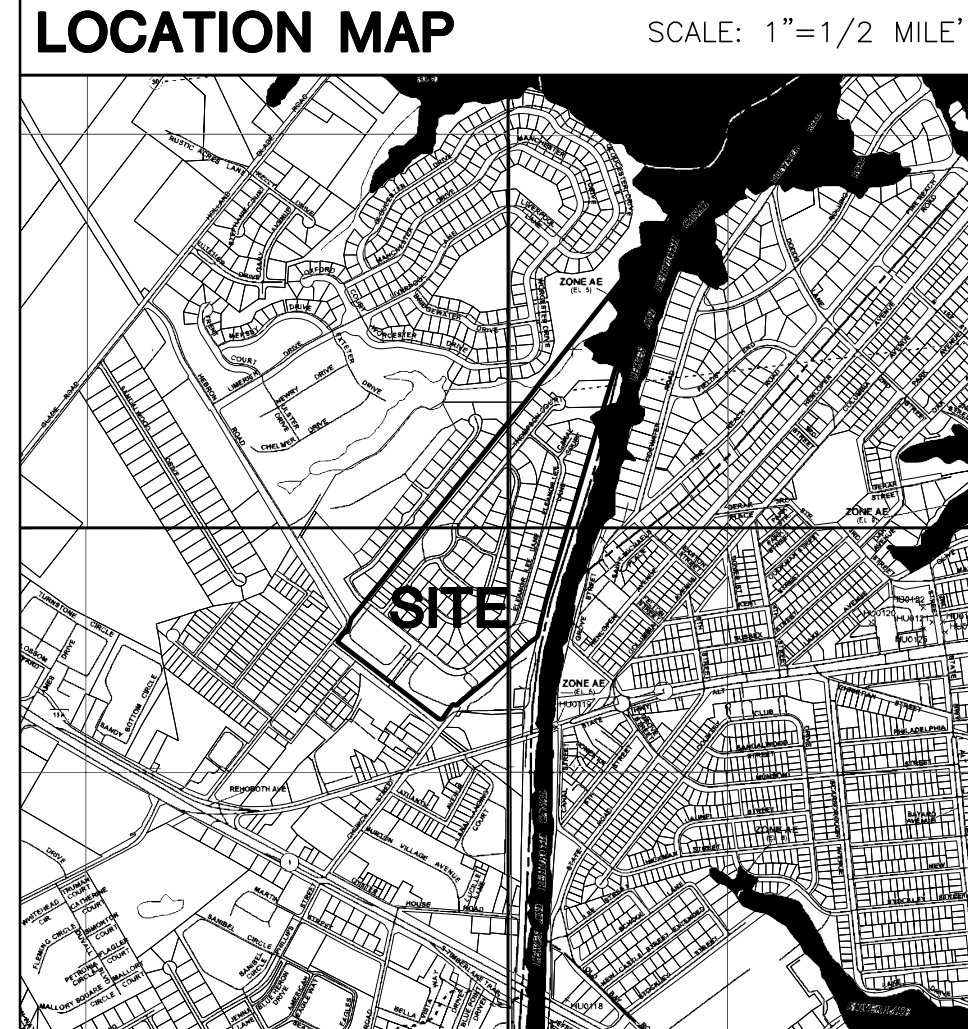
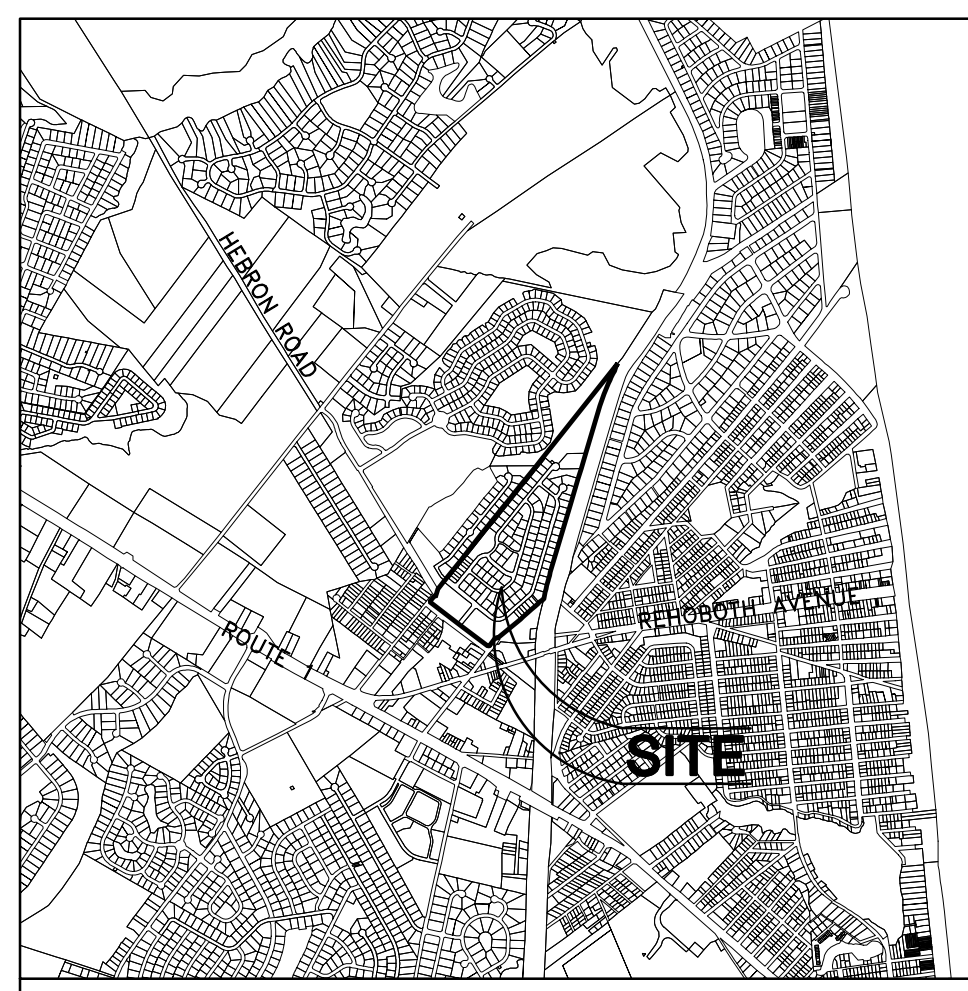
DBF PROJECT NO. 226J010
DECEMBER, 2018

CONDITIONS OF APPROVAL (ORDINANCE #1279, CZ 1852)

- THE STREETS WITHIN THE PROJECT SHALL BE BUILT TO STATE SPECIFICATIONS WITH CURBING.
- STREETLIGHTING SHALL BE PROVIDED.
- THE DEVELOPERS SHALL DEDICATE A MULTIMODAL CORRIDOR TO THE STATE OF DELAWARE, AS PRESENTED BY THE DEVELOPERS DURING THE PUBLIC HEARING.
- IF IT IS DETERMINED THAT A TRAFFIC CONTROL SYSTEM IS REQUIRED, THE DEPARTMENT OF TRANSPORTATION SHALL DETERMINE THE DEVELOPER CONTRIBUTION FOR A TRAFFIC CONTROL SYSTEM. THE DEVELOPERS SHALL ESCROW THE APPROPRIATE FUNDING TO SUSSEX COUNTY TO HOLD IN ESCROW UNTIL THE TRAFFIC LIGHTING SYSTEM IS COMPLETED. IF THE TRAFFIC CONTROL SYSTEM IS NOT COMPLETED WITHIN FIVE YEARS, THE FUNDING SHALL BE RETURNED TO THE DEVELOPERS.
- ACCESS TO THE PROJECT SHALL BE CREATED AT THE MULTIMODAL CORRIDOR. THE DEPARTMENT OF TRANSPORTATION SHALL DETERMINE THE LOCATION OF THE ACCESS ON THE MULTIMODAL CORRIDOR.
- THE MAXIMUM NUMBER OF UNITS FOR THE PROJECT SHALL NOT EXCEED 170 UNITS, WITH NO MORE THAN 51 MULTI-FAMILY CONDOMINIUM UNITS, 14 MULTI-FAMILY DUPLEX UNITS, AND 105 SINGLE FAMILY LOTS. BY COMPARISON, THE EXISTING ZONINGS OF C-1 GENERAL COMMERCIAL AND AR-1 AGRICULTURAL RESIDENTIAL COULD PERMIT 160 OR MORE UNITS, AND A SUBDIVISION PROJECT WITH MR MEDIUM DENSITY RESIDENTIAL ZONING COULD PERMIT 200 OR MORE UNITS.
- THE PROJECT SHALL BE PHASED. THE FIRST PHASE SHALL INCLUDE NO MORE THAN 20 CONDOMINIUM UNITS, 8 DUPLEX UNITS, AND 25 SINGLE-FAMILY LOTS. ANY ADDITIONAL PHASES SHALL NOT EXCEED 20 CONDOMINIUM UNITS, 8 DUPLEX UNITS, AND 30 SINGLE-FAMILY LOTS.
- ALL RECREATIONAL AMENITIES SHALL BE COMPLETED PRIOR TO THE START OF A SECOND PHASE.
- THE PROJECT SHALL BE SERVED BY A CENTRAL WATER SYSTEM.
- THE PROJECT SHALL BE SERVED BY A CENTRAL SEWER SYSTEM.
- IF IT IS FOUND THAT ADDITIONAL AREA IS NEEDED FOR STORMWATER MANAGEMENT, PARKING, OR OTHER USE, THE ADDITIONAL AREA SHALL BE TAKEN FROM LOT AREAS, NOT DESIGNATED OPEN SPACE AREAS.
- THE SITE PLAN SHALL BE SUBJECT TO REVIEW BY THE TECHNICAL ADVISORY COMMITTEE PRIOR TO SUBMITTAL TO THE PLANNING AND ZONING COMMISSION.
- THE PRELIMINARY SITE PLAN SHALL BE SUBMITTED TO THE PLANNING AND ZONING COMMISSION FOR REVIEW.
- THE FINAL SITE PLAN SHALL BE SUBJECT TO REVIEW AND APPROVAL BY THE PLANNING AND ZONING COMMISSION UPON RECEIPT OF ALL APPROPRIATE AGENCY APPROVALS.
- THE NEW LOTS SHALL ALL BE SUBJECT TO THE DECLARATION OF COVENANTS, CONDITIONS, EASEMENTS AND RESTRICTIONS FOR CANAL CORKRAN.
- ANY OF THE NEW LOTS THAT HAVE WETLANDS WITHIN THEIR BOUNDARIES SHALL CONTAIN THE "WETLANDS NOTICE" IN THEIR DEED AS REQUIRED BY SECTION 99-6H OF THE SUBDIVISION CODE. IN ADDITION, ALL OF THE WETLANDS AREAS WITHIN EACH LOT SHALL BE CLEARLY MARKED WITH PERMANENT MARKERS TO IDENTIFY THEM AS NON-DISTURBANCE AREAS.
- THE BUILDING SETBACK REAR LINE WILL BE MEASURED FROM THE WETLANDS DELINEATION LINE, NOT FROM THE REAR LOT LINE.

GENERAL NOTES:

- NO LANDSCAPING SHALL BE ALLOWED WITHIN R/W UNLESS THE PLANS ARE COMPLIANT WITH SECTION 3.7 OF THE DEVELOPMENT COORDINATION MANUAL (DCM).
- ALL ENTRANCES SHALL CONFORM TO THE DELAWARE DEPARTMENT OF TRANSPORTATION'S (DELDOT'S) CURRENT DEVELOPMENT COORDINATION MANUAL (DCM) AND SHALL BE SUBJECT TO ITS APPROVAL.
- 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 DESIGNATED 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.
- SUBDIVISION STREETS CONSTRUCTED WITHIN THE LIMITS OF THE RIGHT-OF-WAY ARE PRIVATE AS SHOWN ON THIS PLAN AND ARE TO BE MAINTAINED BY THE DEVELOPER, PROPERTY OWNERS OR BOTH. THE STATE OF DELAWARE ASSUMES NO MAINTENANCE RESPONSIBILITIES FOR THE FUTURE MAINTENANCE OF THESE STREETS.
- THE SIDEWALK SHALL BE THE RESPONSIBILITY OF THE DEVELOPER, THE PROPERTY OWNERS OR BOTH WITHIN THIS SUBDIVISION. THE STATE OF DELAWARE ASSUMES NO RESPONSIBILITY FOR THE FUTURE MAINTENANCE FOR THE SIDEWALK.
- ALL UNITS SHALL HAVE ACCESS FROM THE INTERNAL SUBDIVISION STREET.
- ALL FIRE LANES, FIRE HYDRANTS, AND FIRE DEPARTMENT CONNECTIONS SHALL BE MARKED IN ACCORDANCE WITH THE DELAWARE STATE FIRE PREVENTION REGULATIONS. BUILDING CONSTRUCTION TO BE MASONRY AND WOOD.
- AFTER THE CREATION OF THE COMMUNITY'S HOMEOWNER'S ASSOCIATION ALL BUFFER AREAS, AND THE STORMWATER MANAGEMENT AREA, SHALL BE OWNED AND MAINTAINED BY THE COMMUNITY'S HOMEOWNER'S ASSOCIATION. THE DEVELOPER SHALL MAINTAIN THESE AREAS UNTIL THE COMMUNITY HOMEOWNER'S ASSOCIATION IS ESTABLISHED.
- WHEN LAND BEING SUBDIVIDED CONTAINS WETLANDS, EITHER STATE OF FEDERAL, THE DEEDS FOR THOSE LOTS SHALL CONTAIN A DISCLOSURE STATEMENT THAT READS, "THIS SITE CONTAINS REGULATED WETLANDS. ACTIVITIES WITHIN THESE WETLANDS MAY REQUIRE A PERMIT FROM THE U.S. ARMY CORPS OF ENGINEERS AND/OR THE STATE OF DELAWARE."
- MOBILE OR MANUFACTURED HOMES ARE PROHIBITED FROM BEING USED AS SINGLE FAMILY DWELLINGS ON INDIVIDUAL LOTS.
- BOUNDARY INFORMATION SHOWN ON THIS PLAN IS THE RESULT OF A FIELD RUN SURVEY PERFORMED BY DAVIS, BOWEN AND FRIEDEL, INC. (DBF) IN DECEMBER 2017 AND INFORMATION FOUND AT THE RECORDER OF DEEDS OFFICE FOR SUSSEX COUNTY. EXISTING UTILITIES AND TOPOGRAPHICAL INFORMATION SHOWN ON THIS PLAN IN THE VICINITY OF THOMPSON COURT EXTENDED ARE THE RESULT OF A TOPOGRAPHICAL SURVEY PERFORMED BY DBF IN DECEMBER 2017.
- A WETLANDS DELINEATION WAS PERFORMED BY ENVIRONMENTAL RESOURCES, INC. IN SEPTEMBER 2017.
- THIS SITE IS IMPACTED BY THE 100-YEAR FLOODPLAIN AS DETERMINED BY FEMA PANEL 10005C0351K, 10005C0352K, 10005C0353K, 10005C0354K, DATED MARCH 16, 2015. THIS PLAN DOES NOT VERIFY THE LOCATION, EXISTENCE, OR NON-EXISTENCE OF EASEMENTS OR RIGHT-OF-WAYS CROSSING THE SUBJECT PROPERTY AS NO TITLE SEARCH WAS PERFORMED OR PROVIDED.
- UTILITY EASEMENTS DEPICTED HERON REPRESENT, TO THE GREATEST EXTENT PERMITTED BY LAW, PRIVATE EASEMENTS FOR THE EXCLUSIVE USE AND BENEFIT OF THOSE UTILITY COMPANIES AND/OR OTHER PROVIDERS OF SERVICES TO THE DEVELOPMENT AS MAY BE DESIGNATED BY THE OWNER, OR ITS SUCCESSORS AND ASSIGNS, FROM TIME TO TIME BY AN INSTRUMENT IN WRITING, AND IN NO WAY GRANT, CONVEY OR CREATE ANY GENERAL PUBLIC UTILITY EASEMENT OR ANY GENERAL OR PUBLIC ACCESS RIGHTS.
- UNLESS OTHERWISE DESIGNATED BY OWNER, OR ITS SUCCESSORS AND ASSIGNS, FROM TIME TO TIME BY AN INSTRUMENT IN WRITING, STORM DRAIN EASEMENTS DEPICTED HERON REPRESENTS PRIVATE EASEMENTS TO ACCESS THE STORM DRAINS FOR THE SOLE PURPOSE OF MAINTAINING AND REPAIRING SUCH STORM DRAINS, AND IN NO WAY GRANT, CONVEY OR CREATE ANY GENERAL PUBLIC UTILITY EASEMENT OR ANY GENERAL OR PUBLIC ACCESS RIGHTS.
- FOR RESTRICTIONS AND COVENANTS BINDING THIS SUBDIVISION REFER TO THE DECLARATION OF COVENANTS AND RESTRICTIONS RECORDED IN THE RECORDER OF DEEDS OFFICE IN AND FOR SUSSEX COUNTY, STATE OF DELAWARE IN DEED BOOK _____, PAGE _____, DATED _____.
- FOR THE MAINTENANCE AND OPERATION OF STREET AND ROAD IMPROVEMENTS, SURFACE DRAINAGE FACILITIES, EROSION AND SEDIMENT CONTROL FACILITIES, SANITARY SEWER FACILITIES, WATER SUPPLY FACILITIES, FORESTED BUFFER STRIPS OR OTHER IMPROVEMENTS WHICH MAY BE APPLICABLE REFER TO THE DECLARATION OF COVENANTS AND RESTRICTIONS.
- ALL INTERIOR LOT LINES ARE RESERVED FOR THE CENTERLINE OF A TEN (10) FOOT WIDE DRAINAGE AND/OR UTILITY EASEMENT. ALL PERIMETER LOT LINES SHALL HAVE TEN (10) FOOT EASEMENTS ALONG THE INTERIOR SIDE OF THE PERIMETER BOUNDARY.



WETLANDS STATEMENT
I, EDWARD M. LAUNAY, PWS, STATE THAT THE BOUNDARIES OF WATERS OF THE UNITED STATES INCLUDING WETLANDS SUBJECT TO THE CORPS OF ENGINEERS REGULATORY PROGRAM DELINEATED UPON THIS PLAN HAVE BEEN DETERMINED USING MY PROFESSIONAL JUDGEMENT IN ACCORDANCE WITH THE 1987 CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL, REGULATIONS AND SUPPLEMENTAL GUIDANCE (33 CFR 328.3(A)(8), WATERS OF THE U.S. DEFINITION/CECW-OR, 9-26-1990, RGL 90-7/CECW-OR, 3-6-1992, CLARIFICATION AND INTERPRETATION OF THE 1987 MANUAL. THIS DELINEATION HAS NET BEEN CONDUCTED FOR USDA PROGRAM OR AGRICULTURAL PURPOSES.
IN ACCORDANCE WITH DNREC TIDAL WETLAND MAPS, THERE ARE NO STATE REGULATED WETLANDS ON THE SITE.

EDWARD M. LAUNAY, PWS No. 875 DATE _____
SOCIETY OF WETLANDS SCIENTISTS
CERTIFIED WETLAND DELINEATOR WDCP93MD05100368

DATA COLUMN

TAX MAP ID:	334-13.00-1318.00 (LOT 21) 334-13.00-1319.00 (LOT 22) 334-13.00-1320.00 (LOT 23) 334-13.00-1411.00 (PRIVATE STREETS) 334-13.00-1412.00 (PRIVATE OPEN SPACE PARK AREA 3) 334-13.00-1414.00 (PUMP STATION)
DEED REFERENCE:	DEED BOOK 2388, PAGE 268
DATUM:	NAVD 88
VERTICAL:	NAD 83 (DE STATE PLANE)
HORIZONTAL:	
LAND USE EXISTING:	RESIDENTIAL CLUSTER DEVELOPMENT
PROPOSED:	RESIDENTIAL CLUSTER DEVELOPMENT
ZONING EXISTING:	MR, C-1
BUILDING SETBACKS:	
FRONT SETBACK:	30'
SIDE SETBACK:	10'
REAR SETBACK:	10' (5' FROM WETLANDS LINE)
PROPOSED BUILDING HEIGHT:	42' MAXIMUM
PROPOSED CONSTRUCTION:	WOOD/CONCRETE BLOCK
UNITS:	
EXISTING:	
SINGLE-FAMILY DWELLING UNITS:	99
MULTI-FAMILY DUPLEX UNITS:	14
MULTI-FAMILY TOWNHOUSE UNITS:	51
TOTAL No. LOTS/UNITS:	164
PROPOSED:	
SINGLE-FAMILY DWELLING UNITS:	8 GROSS - 2 EXISTING = 6 NET
TOTAL No. LOTS/UNITS:	170
AREAS:	
EXISTING:	
LOT 21:	1.3286 AC.
LOT 22:	7.0031 AC.
LOT 23:	0.2755 AC.
PRIVATE STREETS:	10.079 AC.
PRIVATE OPEN SPACE "PARK AREA 3":	0.9727 AC.
PUMP STATION:	0.0314 AC.
TOTAL SITE:	65.0939 AC.
PROPOSED:	
LOT 23:	0.2837 AC.
PRIVATE STREETS:	10.3986 AC.
PRIVATE OPEN SPACE "PARK AREA 3":	1.0254 AC.
LAND TO BE CONVEYED TO SUSSEX CO.:	0.0145 AC. (P/O PUMP STATION)
LOT AREA:	3.9722 AC.
RESIDUAL LANDS/OPEN SPACE:	3.9623 AC.
PUMP STATION:	0.0459 AC.
TOTAL SITE:	65.0794 AC.
EXISTING DENSITY:	2.52 D.U./ACRE
PROPOSED DENSITY:	2.61 D.U./ACRE
WETLANDS IN LOTS:	1.4512 AC.
WETLANDS IN OPEN SPACE:	3.0602 AC.
TOTAL WETLANDS:	4.5114 AC.
UTILITIES:	
SEWER PROVIDER:	SUSSEX COUNTY
WATER PROVIDER:	CITY OF REHOBOTH

FLOODPLAIN - THE PROPERTY IS IMPACTED BY THE 100 YEAR FLOODPLAIN AS DETERMINED BY FEMA PANEL 10005C0351K, 10005C0352K, 10005C0353K, 10005C0354K, DATED MARCH 16, 2015.

PROPERTY OWNER/DEVELOPER (PARCEL 1318.00 & 1319.00)
CANAL CORKRAN, LLC.
P.O. BOX 605
REHOBOTH BEACH, DE 19971
(302) 227-3883

PROPERTY OWNER (PARCEL 1320.00)
CARRIE E. LINGO
11 DODDS LANE
REHOBOTH BEACH, DE 19971
PB: 4081 PG:176

OWNER (PARCEL 1411.00 & 1412.00)
CANAL CORKRAN HOMEOWNERS ASSOC.
P.O. BOX 605
REHOBOTH BEACH, DE 19971
(302) 227-3883

OWNER (PARCEL 1414.00)
SUSSEX COUNTY
P.O. BOX 589
GEORGETOWN, DE 19947

ENGINEER:
DAVIS, BOWEN, & FRIEDEL, INC.
RING W. LARDNER, P.E.
1 PARK AVE.
MILFORD, DE 19965
PHONE: 302-424-1441
FAX: 302-424-0430

SUPERSEDE NOTE:
THIS PLAN SUPERSEDES IN ITS ENTIRETY THE RECORD SUBDIVISION PLAT FOR CANAL CORKRAN RECORDED IN PLAT BOOK 72, PAGES 261, 262, & 263 AT THE RECORDER OF DEEDS IN AND FOR SUSSEX COUNTY.

PURPOSE NOTE:
THE PURPOSE OF THIS PLAN IS TO SUBDIVIDE LOTS 21 AND 22 INTO EIGHT (8) LOTS.

ENGINEER'S STATEMENT

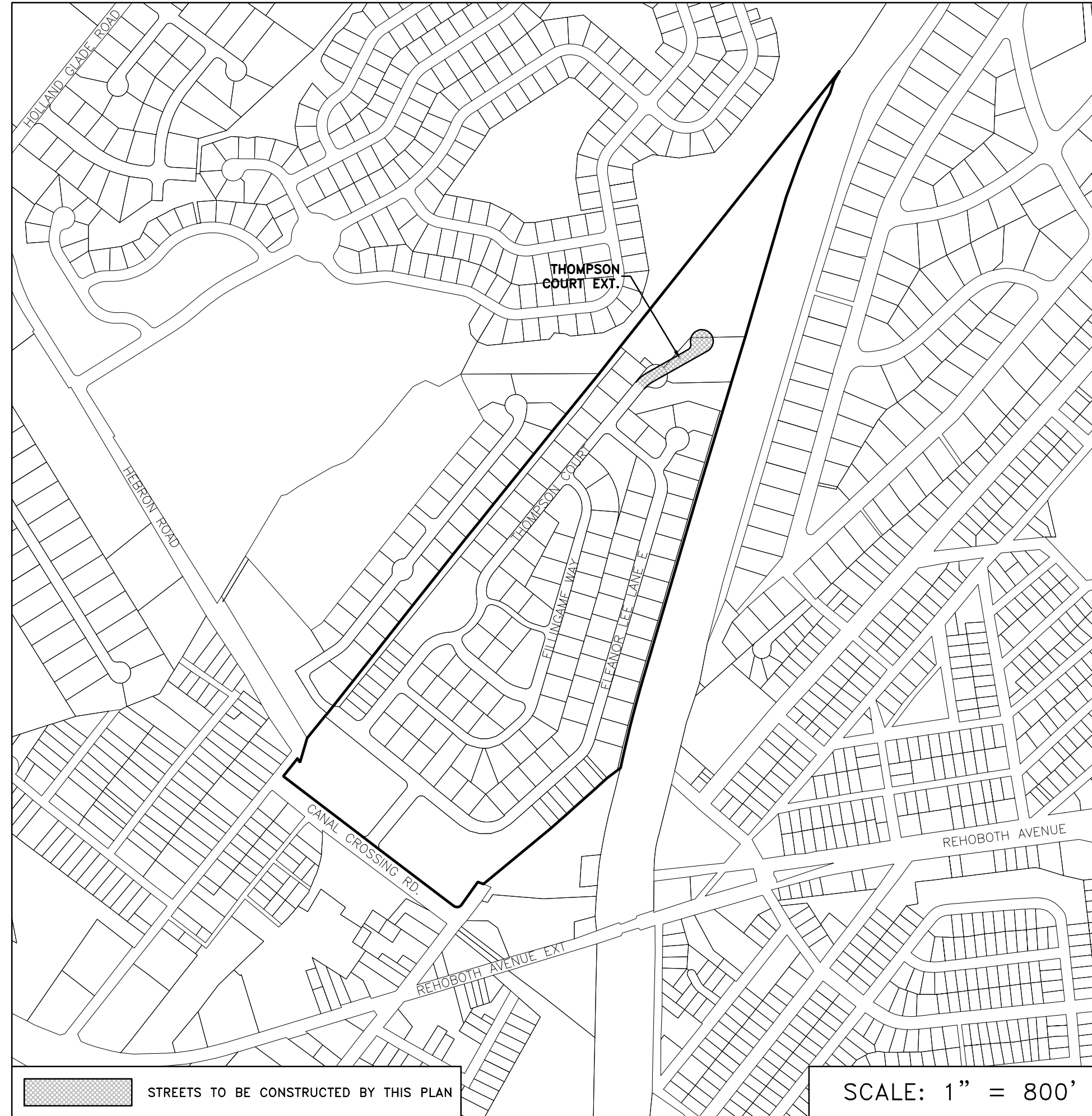
I, RING W. LARDNER, P.E., HEREBY STATE THAT I AM A REGISTERED ENGINEER IN THE STATE OF DELAWARE, THAT THE INFORMATION SHOWN HERON HAS BEEN PREPARED UNDER MY SUPERVISION AND TO MY BEST KNOWLEDGE AND BELIEF REPRESENTS GOOD ENGINEERING PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.

DAVIS, BOWEN & FRIEDEL, INC. DATE _____
by RING W. LARDNER, P.E.

OWNER'S CERTIFICATION

I, THE UNDERSIGNED, HEREBY CERTIFY THAT I AM THE OWNER OF THE PROPERTY DESCRIBED ON THIS PLAN, THAT THE PLAN WAS MADE BY MY DIRECTION AND 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.

CANAL CORKRAN, LLC. DATE _____
P.O. BOX 605
REHOBOTH BEACH, DE 19971
(302) 227-3883



SHEET INDEX

RECORD PLAN - TITLE SHEET	V-101
RECORD PLAN - OVERVIEW	V-102
RECORD PLAN	V-103 - V-104

SUSSEX COUNTY PLANNING & ZONING APPROVAL

SUSSEX COUNTY PLANNING & ZONING STAFF DATE _____
SUSSEX COUNTY COUNCIL PRESIDENT DATE _____

SUSSEX CONSERVATION DISTRICT

EXISTING	LEGEND	PROPOSED
BOUNDARY LINE	--- ---	RIGHT-OF-WAY / BOUNDARY LINE
ADJACENT PROPERTY OWNER	--- ---	EASEMENT
EASEMENT	--- ++ ---	BUFFER
CONTOUR	--- 3.3 ---	SANITARY SEWER IDENTIFICATION, MANHOLE, PIPE, FLOW ARROW, PIPE SIZE
CATCH BASIN, STORM PIPE	[Symbol]	WATER MAIN, TEE W/ VALVES, PIPE SIZE
SANITARY SEWER MANHOLE, PIPE	[Symbol]	FIRE HYDRANT ASSEMBLY
WATER MAIN	EX-W ---	TREE LINE
FIRE HYDRANT ASSEMBLY	[Symbol]	PAVEMENT
UTILITY POLE	[Symbol]	SIDEWALK
SIGN	b	
FENCE	-X-X-X-	
TREE	[Symbol]	
TREE LINE	[Symbol]	
WETLANDS	[Symbol]	
PAVEMENT	[Symbol]	

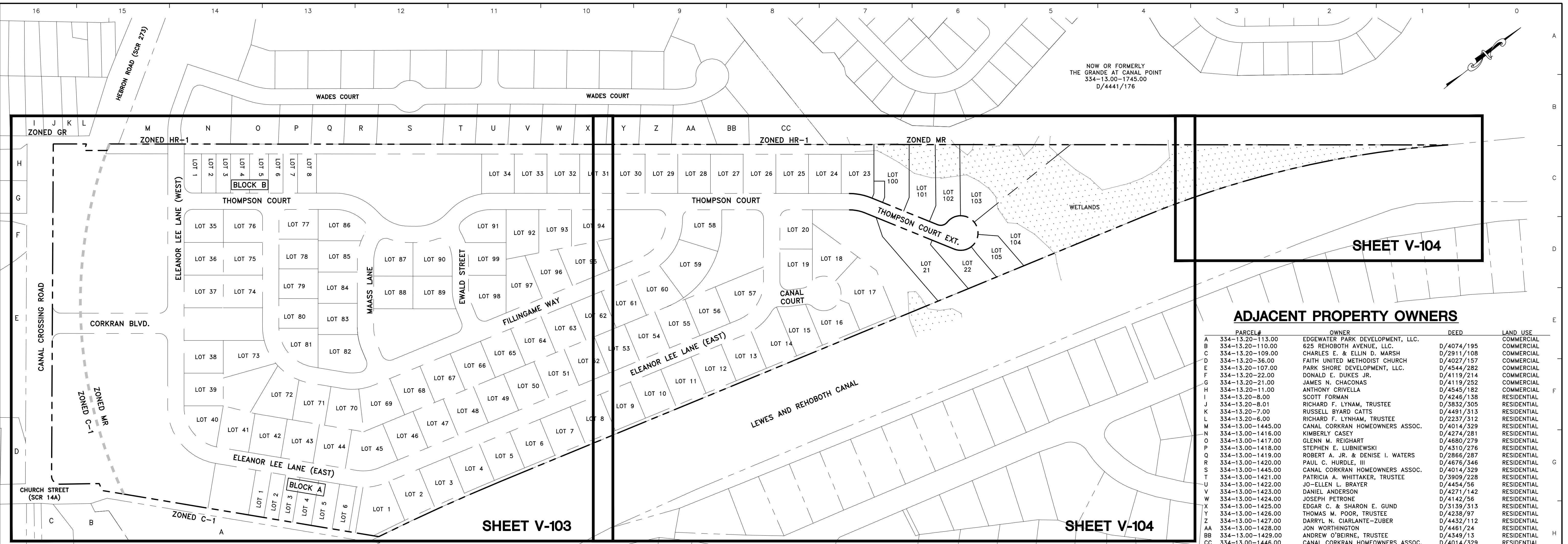


DAVIS, BOWEN & FRIEDEL, INC.
ARCHITECTS, ENGINEERS & SURVEYORS

SALISBURY, MARYLAND (410) 543-9091
MILFORD, DELAWARE (302) 424-1441
EASTON, MARYLAND (410) 770-4744

REVISIONS:
2018-11-28: SCD
SCE-PW
REHOBOTH WATER DEPT.

V-101



ADJACENT PROPERTY OWNERS

PARCEL#	OWNER	DEED	LAND USE
A	334-13.20-113.00	EDGEWATER PARK DEVELOPMENT, LLC.	COMMERCIAL
B	334-13.20-110.00	625 REHOBOTH AVENUE, LLC.	COMMERCIAL
C	334-13.20-109.00	CHARLES E. & ELLIN D. MARSH	COMMERCIAL
D	334-13.20-36.00	FAITH UNITED METHODIST CHURCH	COMMERCIAL
E	334-13.20-107.00	PARK SHORE DEVELOPMENT, LLC.	COMMERCIAL
F	334-13.20-22.00	DONALD E. DUKES JR.	COMMERCIAL
G	334-13.20-21.00	JAMES N. CHACONAS	COMMERCIAL
H	334-13.20-11.00	ANTHONY CRIVELLA	COMMERCIAL
I	334-13.20-8.00	SCOTT FORMAN	RESIDENTIAL
J	334-13.20-8.01	RICHARD F. LYNAM, TRUSTEE	RESIDENTIAL
K	334-13.20-7.00	RUSSELL BYARD GATTS	RESIDENTIAL
L	334-13.20-6.00	RICHARD F. LYNAM, TRUSTEE	RESIDENTIAL
M	334-13.00-1445.00	CANAL CORKRAN HOMEOWNERS ASSOC.	RESIDENTIAL
N	334-13.00-1416.00	KIMBERLY CASEY	RESIDENTIAL
O	334-13.00-1417.00	GLENN M. REIGHART	RESIDENTIAL
P	334-13.00-1418.00	STEPHEN E. LUBNIEWSKI	RESIDENTIAL
Q	334-13.00-1419.00	ROBERT A. JR. & DENISE I. WATERS	RESIDENTIAL
R	334-13.00-1420.00	PAUL C. HURDLE, III	RESIDENTIAL
S	334-13.00-1445.00	CANAL CORKRAN HOMEOWNERS ASSOC.	RESIDENTIAL
T	334-13.00-1421.00	PATRICIA A. WHITTAKER, TRUSTEE	RESIDENTIAL
U	334-13.00-1422.00	JO-EELLEN L. BRAVER	RESIDENTIAL
V	334-13.00-1423.00	DANIEL ANDERSON	RESIDENTIAL
W	334-13.00-1424.00	JOSEPH PETRONE	RESIDENTIAL
X	334-13.00-1425.00	EDGAR C. & SHARON E. GUND	RESIDENTIAL
Y	334-13.00-1426.00	THOMAS M. POOR, TRUSTEE	RESIDENTIAL
Z	334-13.00-1427.00	DARYN N. CIALLANTE-ZUBER	RESIDENTIAL
AA	334-13.00-1428.00	JON WORTHINGTON	RESIDENTIAL
BB	334-13.00-1429.00	ANDREW O'BEIRNE, TRUSTEE	RESIDENTIAL
CC	334-13.00-1446.00	CANAL CORKRAN HOMEOWNERS ASSOC.	RESIDENTIAL

ZONING:
 A-H: GENERAL COMMERCIAL - C-1
 I-L: GENERAL RESIDENTIAL - GR
 M-CC: HIGH DENSITY RESIDENTIAL - HR-1

WETLANDS LINE TABLE

LINE	BEARING	DISTANCE
A1	N 35°59'48"E	66.30
A2	N 60°01'07"E	35.38
A3	N 68°28'11"E	40.77
A4	N 73°47'49"E	56.51
A5	N 53°16'23"E	54.16
A6	N 37°22'58"E	29.79
A7	N 30°47'49"E	79.67
A8	N 65°30'24"E	40.80
A9	N 74°59'56"E	41.87
A10	N 89°28'00"E	29.38
A11	N 89°28'00"E	29.38
A12	N 61°28'43"E	37.73
A13	N 86°10'03"E	52.33
A14	N 43°40'05"E	29.38
A15	N 69°54'56"E	61.93
A16	N 81°21'02"E	59.56
A17	N 85°27'32"E	31.03
A18	N 59°53'54"E	28.15
A19	N 65°41'49"E	50.61
B1	N 75°12'20"E	23.20
B2	N 48°39'45"E	12.42
B3	N 37°02'30"E	32.74
B4	N 33°39'57"E	52.67
B5	N 40°34'45"E	45.71
B6	N 55°53'54"E	23.15
B7	N 89°07'07"E	22.94
B8	N 75°40'54"E	43.36
B9	N 07°32'26"E	21.63
B10	N 39°58'40"E	18.52
B11	N 43°57'06"E	70.34
B12	N 31°10'14"E	24.98
B13	N 42°31'07"E	42.42
B14	N 80°15'50"E	35.30
B15	N 06°04'46"E	36.70
B16	N 21°56'56"E	38.63
B17	N 47°13'29"E	30.98
B18	N 80°58'58"E	46.04
B19	N 78°33'06"E	60.79
B20	N 81°41'16"E	52.28
B21	N 81°57'59"E	50.21
B22	N 24°33'10"E	79.03
B23	N 18°01'04"E	37.19
B24	N 10°02'12"E	51.59
B25	N 05°38'14"E	54.94
B26	N 55°32'49"E	52.85
B27	N 58°01'14"E	11.80
B28	N 66°30'40"E	31.68
B29	N 29°42'19"E	38.38
B30	N 46°06'03"E	37.14
B31	N 80°28'49"E	9.83
B32	N 83°46'39"E	30.42
B33	N 88°20'02"E	24.22
B34	N 35°31'41"E	24.02
B35	N 51°29'51"E	49.46
B36	N 29°27'44"E	17.02

PROPERTY LINE TABLE

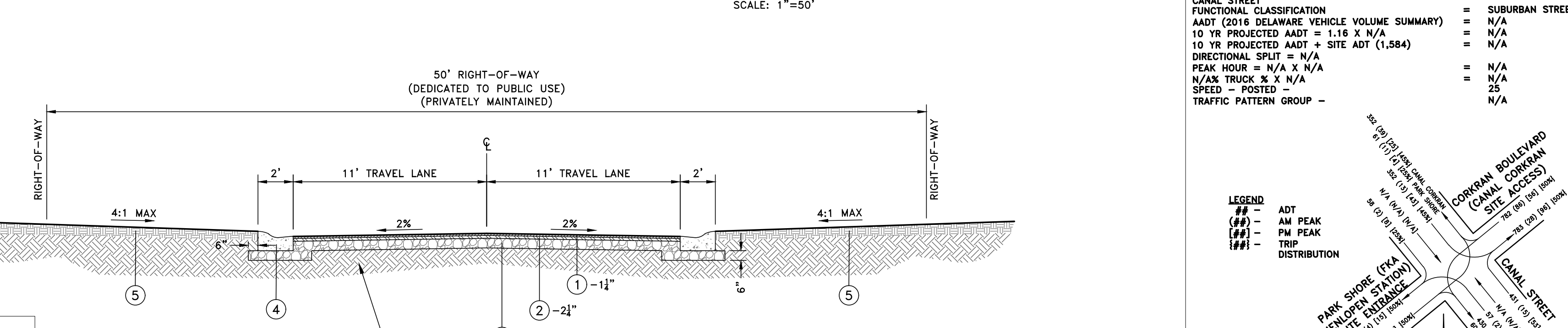
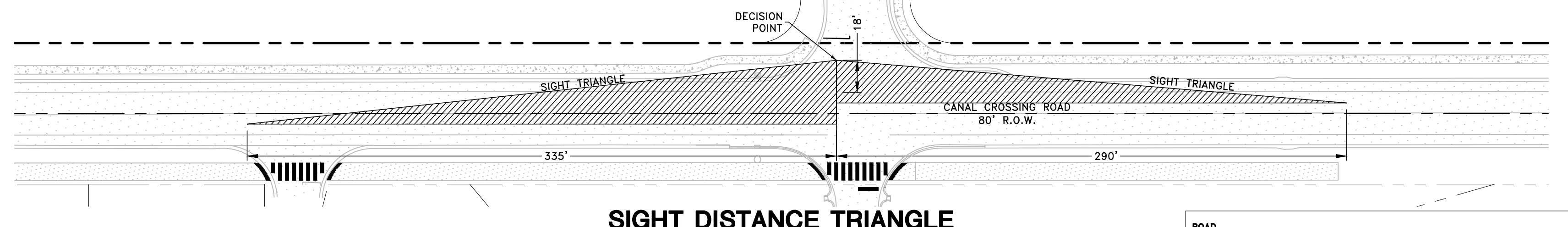
LINE	BEARING	DISTANCE
L1	N 28°26'52"E	15.26
L2	N 38°30'29"E	32.88
L3	N 51°29'51"E	49.46
L4	N 29°27'44"E	17.02

RIGHT-OF-WAY CURVE TABLE

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C-1	39.75	25.00	91°06'51"	S 83°16'11" E	35.99
C-2	39.16	25.00	89°54'53"	N 06°19'57" W	35.08
C-3	40.84	26.00	90°00'00"	N 83°32'57" E	36.77
C-4	246.05	175.00	80°53'52"	N 88°16'11" E	226.28
C-5	97.40	175.00	51°53'18"	N 93°02'46" E	96.15
C-6	114.56	175.00	37°26'27"	N 02°37'07" W	112.33
C-7	28.91	26.00	63°41'57"	N 10°30'38" E	27.44
C-8	36.17	175.00	11°50'35"	S 86°28'19" E	36.11
C-9	21.87	25.00	50°07'54"	N 85°35'00" E	21.18
C-10	259.25	53.00	280°15'48"	N 59°28'57" W	67.95
C-11	21.87	25.00	50°07'54"	S 05°27'06" W	21.18
C-12	44.49	26.00	98°11'54"	S 79°32'00" W	39.25
C-13	40.84	26.00	90°00'00"	N 06°27'03" W	36.77
C-14	48.15	125.00	22°04'08"	N 49°32'35" E	47.85
C-15	234.60	53.00	255°37'07"	N 68°13'50" W	84.87
C-16	32.84	26.00	90°00'00"	S 23°46'08" W	29.96
C-17	67.41	175.00	22°04'08"	S 49°32'35" W	66.99
C-18	139.61	175.00	45°42'35"	S 15°41'39" W	135.94
C-19	99.72	125.00	45°42'35"	S 15°41'39" W	97.10
C-20	99.72	125.00	45°42'35"	S 61°24'14" W	97.10
C-21	139.61	175.00	45°42'35"	S 61°24'14" W	135.94
C-22	40.84	26.00	90°00'00"	S 83°32'57" W	36.77
C-23	40.84	26.00	90°00'00"	S 06°27'06" E	36.77
C-24	39.38	25.00	90°15'08"	S 83°40'31" W	35.43
C-25	40.84	26.00	90°00'00"	S 06°27'03" E	36.77
C-26	175.75	125.00	80°53'52"	N 88°16'11" E	161.63
C-27	98.57	125.00	89°59'54"	S 06°27'06" E	36.77
C-28	147.38	125.00	67°33'10"	N 17°40'28" W	138.99
C-29	40.84	26.00	90°00'00"	S 83°32'57" W	36.77
C-30	40.84	26.00	90°00'00"	S 06°27'03" E	36.77
C-31	206.33	175.00	67°33'10"	S 17°40'28" E	194.58
C-32	97.40	175.00	31°53'18"	S 32°02'46" W	96.15
C-33	246.05	175.00	80°53'52"	S 88°16'11" W	226.28
C-34	40.84	26.00	90°00'00"	S 83°32'57" W	36.77
C-35	40.84	26.00	89°59'54"	S 06°27'01" E	36.77
C-36	175.75	125.00	80°53'52"	N 88°16'12" E	161.63
C-37	44.47	125.00	20°23'01"	N 37°47'54" E	44.24
C-38	46.05	125.00	101°30'06"	N 23°08'39" W	40.27
C-39	68.56	175.00	22°26'49"	N 62°40'28" W	68.12
C-40	94.71	175.00	31°00'54"	N 35°56'49" W	93.56
C-41	68.94	175.00	22°26'49"	N 59°24'51" W	32.70
C-42	97.11	125.00	44°30'50"	S 60°48'21" W	94.69
C-43	38.19	26.00	84°10'01"	S 17°16'49" W	34.85
C-44	58.14	125.00	26°36'52"	S 38°07'37" E	57.61
C-45	48.94	125.00	22°26'49"	N 62°40'28" W	48.66
C-46	40.84	26.00	90°00'00"	N 61°06'07" E	36.77
C-47	40.84	26.00	90°00'00"	N 28°53'53" W	36.77
C-48	68.95	175.00	22°26'49"	N 62°40'28" W	68.51
C-49	58.17	125.00	26°39'47"	N 64°46'56" W	57.65
C-50	38.19	26.00	84°08'54"	S 59°48'44" W	34.84
C-51	63.56	175.00	20°48'40"	S 28°08'37" W	63.22
C-52	63.57	175.00	30°48'58"	S 33°24'24" W	63.24
C-53	54.55	26.00	76°07'39"	S 44°24'10" E	32.06
C-54	94.73	175.00	31°00'56"	S 66°57'31" E	93.58
C-55	48.94	125.00	22°26'49"	S 62°40'28" W	48.52
C-56	40.84	26.00	90°00'00"	N 61°06'07" E	36.77
C-57	147.38	125.00	67°33'10"	N 17°40'28" W	138.99
C-58	40.84	26.00	90°00'00"	S 83°32'57" W	36.77
C-59	97.93	125.00	44°33'17"	S 16°06'18" W	95.45

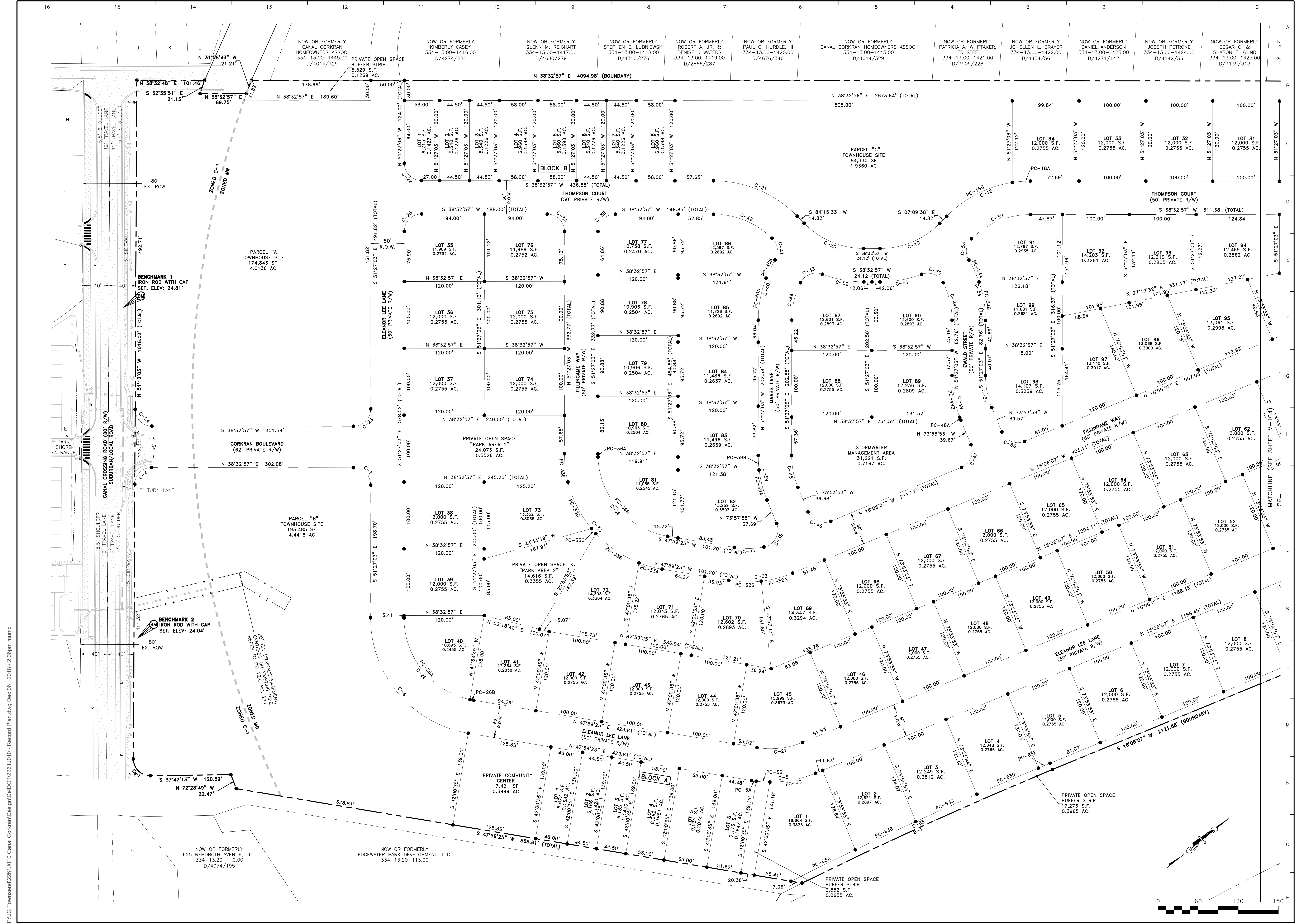
PROPERTY CURVE TABLE

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
PC-5A	7.14	175.00	2°20'18"	N 46°49'18" E	7.14
PC-5B	20.49	175.00	6°42'54"	N 40°17'50" E	20.49
PC-5C	69.78	175.00	22°50'26"	N 27°31'20" E	69.30
PC-6A	23.25	175.00	7°56'42"	N 12°17'46" E	23.23
PC-6B	91.11	175.00	29°49'45"	N 06°25'28" W	90.08
PC-7A	17.97	26.00	39°58'33"	N 01°32'04" W	17.62
PC-7B	10.93	26.00	24°05'24"	N 30°18'55" E	10.85
PC-10A	101.94	53.00	110°12'15"	N 25°32'49" E	86.94
PC-10B	63.86	53.00	69°02'18"	N 64°04'28" W	60.07
PC-10C	77.44	53.00	83°42'52"	S 39°32'57" W	70.73
PC-10D	16.01	53.00	17°18'23"	S 10°57'40" E	15.95
PC-15A	85.21	53.00	59°41'13"	N 30°44'02" E	52.78
PC-15B	44.41	53.00	48°00'21"	N 23°06'40" W	43.12
PC-15C	40.00	53.00	43°14'32"	N 68°44'07" W	39.06
PC-15D	47.89	53.00	51°46'24"	S 63°45'26" W	46.28
PC-15E	47.89	53.00	50°54'33"	S 12°24'58" W	45.56
PC-18A	27.28	175.00	8°55'30"	S 34°05'11" W	27.23
PC-18B	112.35	175.00	36°47'08"	S 11°13'54" W	110.43
PC-26A	170.05	125.00	77°58'35"	N 89°34'39" E	157.23
PC-26B	5.71	125.00	2°36'57"	N 49°17'53" E	5.71
PC-31A	61.29	175.00	20°03'55"	S 41°25'06" E	60.97
PC-31B	101.50	175.00	33°09'56"	S 14°48'10" E	99.89
PC-31C	43.74	175.00	14°19'19"	S 09°58'27" W	43.63
PC-32A	48.70	175.00	15°56'42"	S 24°04'27" W	48.54
PC-32B	48.70	175.00	15°56'36"	S 40°01'06" W	48.54
PC-33A	35.99	175.00	11°48'57"	S 53°52'53" W	35.92
PC-33B	78.65	175.00	25°45'00"	S 72°38'51" W	77.98
PC-33C	9.99	175.00	3°16'19"	S 87°09'31" W	9.99
PC-33D	78.65	175.00	25°44'59"	N 78°19'50" W	77.99
PC-36A	4.73	125.00	2°10'08"	S 52°32'07" E	4.73
PC-36B	171.02	125.00	78°23'20"	N 87°11'08" E	157.99
PC-39A	46.80	175.00	15°15'28"	N 66°16'08" W	46.45
PC-39B	21.98	175.00	7°11'20"	N 55°02'44" W	21.94
PC-40A	64.10	175.00	20°59'16"	N 40°57'27" W	63.75
PC-40B	30.61	175.00	10°01'17"	N 25°27'10" W	30.57
PC-48A	4.92	175.00	1°58'07"	N 73°05'50" W	4.92
PC-48B	64.03	175.00	20°50'43"	N 61°52'25" W	63.68
PC-54A	36.21	175.00	11°51'23"	S 76°32'18" E	36.15
PC-54B	58.52	175.00	19°09'33"	S 61°01'50" E	58.25
PC-60	317.13	270.00	67°17'48"	N 17°48'09" W	299.21
PC-60A	56.97	270.00	12°05'22"	N 10°03'26" E	56.86
PC-60B	180.00	270.00	38°11'50"	N 15°05'10" W	176.69
PC-60C	81.36	270.00	17°15'58"	N 42°49'04" W	81.06



LEGEND

- BITUMINOUS CONCRETE, SUPERPAVE, TYPE 'C', PG 64-22, 160 GYRATIONS (CARBONATE STONE)
- BITUMINOUS CONCRETE, SUPERPAVE, TYPE 'B', PG 64-22, 160 GYRATIONS
- GRADED AGGREGATE BASE COURSE, TYPE '



P:\UG Townsend\2261\1010 Canal Corkran\Design\DOT\2261\1010 - Record Plan.dwg Dec 06, 2018 - 2:06pm munc

ARCHITECTS ENGINEERS SURVEYORS
 DAVIS, BOWEN & FRIEDEL, INC.
 400 N. MARKET STREET
 WILMINGTON, DELAWARE 19801
 (302) 424-1411
 EASTON, MARYLAND (410) 770-4744

RECORD PLAN

CANAL CORKRAN EXPANSION
CANAL CROSSING ROAD (MAINT. #304631)
LEWES & REHOBOTH HUNDRED, SUSSEX COUNTY, DELAWARE

Revisions:
 2018-11-28: SCD
 SCE-PW

Date: AUGUST, 2018
 Scale: 1" = 60'
 Dwn.By: TAJ
 Proj.No.: 2261J010
 Dwg.No.: V-103

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P:\UG Townsend\22611010 Canal Corkran\Design\22611010_Record Plan.dwg Dec. 28, 2018 - 11:56am mmm

DAVIS, BOWEN & FRIEDEL, INC.

ARCHITECTS ENGINEERS SURVEYORS

SUSSEX COUNTY, DELAWARE
 1000 MARKET STREET, SUITE 200
 WILMINGTON, DELAWARE 19801
 (302) 427-1441
 EASTON, MARYLAND (410) 770-4744

RECORD PLAN

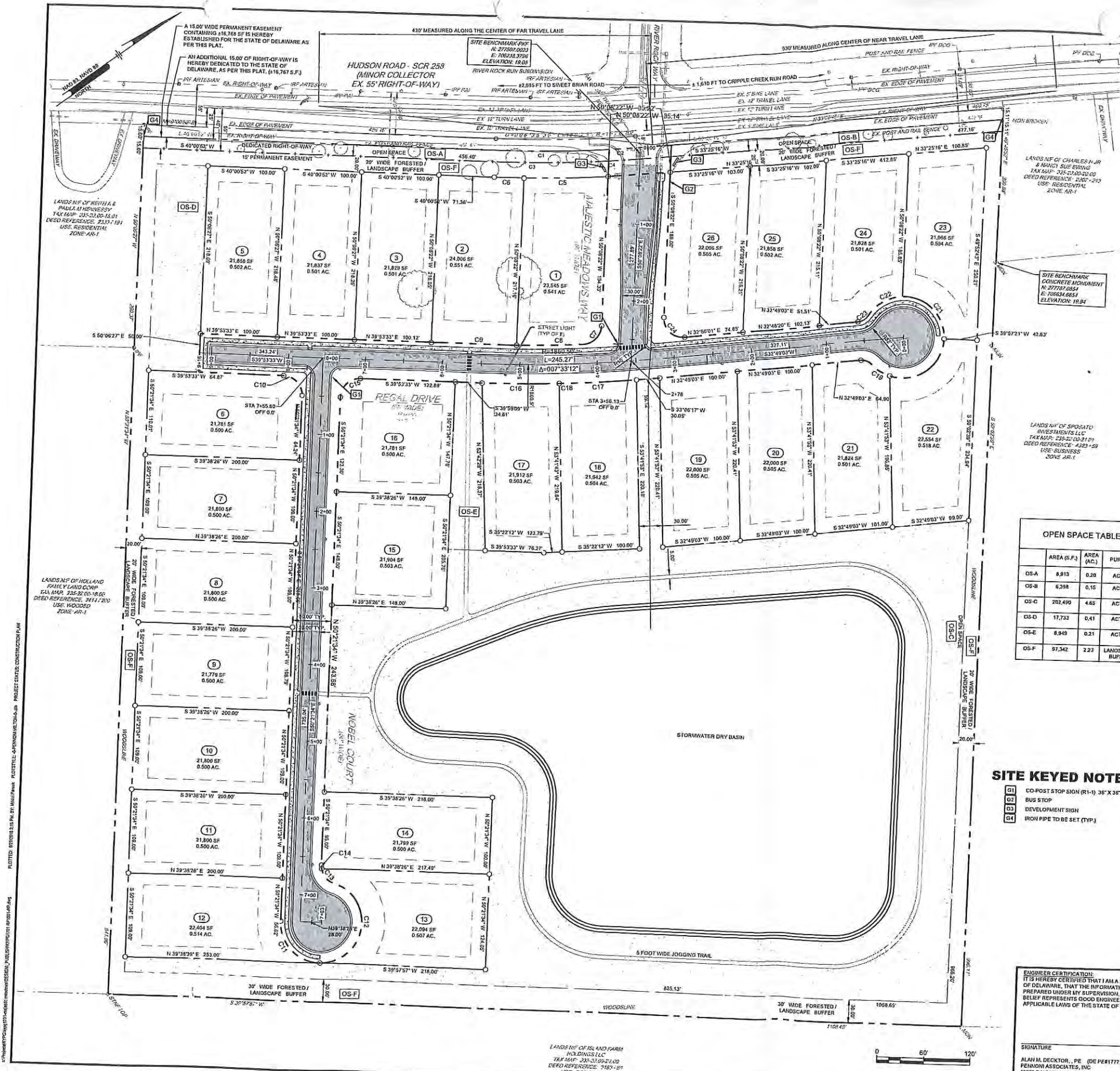
CANAL CORKRAN EXPANSION LEWES & REHOBOTH HUNDRED SUSSEX COUNTY, DELAWARE

Revisions:
 2018-11-28: SCD
 SCE-PW
 REHOBOTH WATER DEPT.

Date: **AUGUST, 2018**
 Scale: **1" = 60'**
 Dwn. By: **TAJ**
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V-104

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CURVE DATA TABLE

CURVE #	RADIUS	DELTA	ARC LENGTH	CHORD LENGTH	CHORD BEARING
C1	1555.50	03°32'35"	125.73	125.69	S 37°44'00" W
C2	1585.50	02°03'00"	56.73	56.73	S 34°26'12" W
C3	1600.50	00°35'35"	184.18	184.08	S 35°42'30" W
C4	1600.50	00°35'35"	184.18	184.08	S 35°42'30" W
C5	1694.76	01°11'44"	38.82	38.82	S 40°00'52" W
C6	25.00	08°54'09"	37.41	34.02	N 07°16'18" W
C7	25.00	08°54'09"	37.41	34.02	N 07°16'18" W
C8	4078.82	01°32'51"	110.18	110.18	N 39°23'00" E
C9	25.00	08°54'09"	39.16	35.28	S 84°45'59" W
C10	53.00	05°59'47"	83.25	74.55	S 84°38'32" W
C11	53.00	05°59'47"	83.25	74.55	S 84°38'32" W
C12	53.00	05°59'47"	83.25	74.55	S 84°38'32" W
C13	25.00	08°54'09"	27.09	25.78	N 87°03'48" E
C14	25.00	07°37'03"	32.12	29.96	N 87°10'05" E
C15	25.00	00°15'07"	39.38	35.43	S 05°14'01" E
C16	1051.64	00°00'04"	100.01	100.00	N 38°05'39" E
C17	185.50	00°32'21"	100.01	100.00	N 38°05'39" E
C18	185.50	00°32'21"	100.01	100.00	N 38°05'39" E
C19	185.50	00°32'21"	100.01	100.00	N 38°05'39" E
C20	185.50	00°32'21"	100.01	100.00	N 38°05'39" E
C21	53.00	08°54'09"	86.78	77.41	S 83°02'51" W
C22	53.00	08°54'09"	86.78	77.41	S 83°02'51" W
C23	17.00	05°07'48"	15.76	15.21	N 06°15'00" E
C24	25.00	01°03'35"	42.34	37.46	N 81°20'20" E

COPY OF PLAN
APPROVED
BY PRZ
JULY 12, 2018

OPEN SPACE TABLE

	AREA (S.F.)	AREA (AC.)	PURPOSE
OS-A	8,913	0.20	ACTIVE
OS-B	6,338	0.15	ACTIVE
OS-C	202,490	4.65	ACTIVE
OS-D	17,732	0.41	ACTIVE
OS-E	8,949	0.21	ACTIVE
OS-F	97,342	2.23	LANDSCAPE BUFFER

SITE KEYED NOTES

- G1 CO-POST STOP SIGN (R1-1) 35" X 35" AND STREET SIGN
- G2 BUS STOP
- G3 DEVELOPMENT SIGN
- G4 IRON PIPE TO BE SET (TYP.)

LEGEND

- IRON PIPE/ROD FOUND
- CONCRETE MONUMENT FOUND
- STONE FOUND
- IRON PIPE TO BE SET
- MONUMENT TO BE SET
- EXISTING PROPERTY LIE
- EASEMENT
- ROW/ADJACENT PROPERTY
- EDGE OF ROAD/PAVEMENT
- CENTERLINE OF ROAD

ENGINEER CERTIFICATION:
IT IS HEREBY CERTIFIED THAT I AM A REGISTERED ENGINEER IN THE STATE OF DELAWARE, THAT THE INFORMATION SHOWN HEREON HAS BEEN PREPARED UNDER MY SUPERVISION, AND TO MY BEST KNOWLEDGE AND BELIEF REPRESENTS GOOD ENGINEERING PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.

SIGNATURE: ALAN M. DECKTOR, PE (DE PE#17771)
DATE: (302) 684-8030

OWNER'S AND DEVELOPER'S CERTIFICATION:
IT IS HEREBY CERTIFIED THAT I AM THE OWNER/DEVELOPER OF THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN. THE PLAN WAS MADE AT MY DIRECTION, THAT I ACKNOWLEDGE THE SAME TO BE MY ACT. IT IS MY DESIRE TO HAVE THE PLAN RECORDED AS SHOWN AND IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS.

SIGNATURE: KEY PROPERTIES GROUP, LLC
DATE: 610 MARSHALL STREET, MILFORD, DELAWARE 19963 (302) 255-2287

Pennoni

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK.

MAJESTIC MEADOWS
SUSSEX COUNTY, BRADDOCK HILL HUNDRED
HUDSON ROAD, 255-2287
SUSSEX COUNTY TAX MAP 2-35-22-00-15-00

RECORD PLAN

KEY PROPERTIES GROUP, LLC
610 MARSHALL STREET
MILFORD, DELAWARE 19963

PENNONI ASSOCIATES, INC.
18072 Davidson Drive
Milton, DE 19968
T 302.684.8030 F 302.684.8054

NO.	DATE	REVISIONS	BY
1	10-20-17	REVISED PER AGENCY COMMENTS	JRE
2	1-28-18	REVISED PER AGENCY COMMENTS	JRE
3	1-28-18	REVISED PER AGENCY COMMENTS	JRE
4	5-2-18	REVISED PER AGENCY COMMENTS	JRE
5	6-27-18	REVISED PER AGENCY COMMENTS	JRE

ENGINEER CERTIFICATION:
ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE THE PROPERTY OF PENNONI ASSOCIATES. ANY REUSE OR REPRODUCTION OF THIS DOCUMENT WITHOUT THE WRITTEN PERMISSION OF PENNONI ASSOCIATES IS STRICTLY PROHIBITED. PENNONI ASSOCIATES ASSUMES NO LIABILITY FOR DAMAGES, LOSSES AND EXPENSES INCURRED BY ANY PARTY AS A RESULT OF THIS PLAN.

PROJECT: KYPG1701
DATE: OCTOBER 2017
DRAWING SCALE: 1"=60'
DRAWN BY: JRE
APPROVED BY: DMH

RP1001
SHEET# 3 OF 5

SITE DATA:

Table with 2 columns: Item Number and Description. Includes tax map number, developer name, zoning, proposed zoning, present use, proposed use, setbacks, dimensions, acreage, and utility information.

OWNER/DEVELOPER: KEY PROPERTIES GROUP, LLC
ENGINEER/SITE DESIGNER: PENNONI ASSOCIATES INC
SURVEYOR: MERIDIAN CONSULTING ENGINEERS, L.L.C.

MAJESTIC MEADOWS

(2017-03)

REVISED FINAL SUBDIVISION PLAT

SUSSEX COUNTY, DELAWARE

JUNE 2018

PREPARED FOR: OWNER/DEVELOPER

KEY PROPERTIES GROUP, LLC

LEGEND

Legend table with columns: EXISTING, PROPOSED, and DESCRIPTION. Lists symbols for utilities, easements, property lines, and other site features.



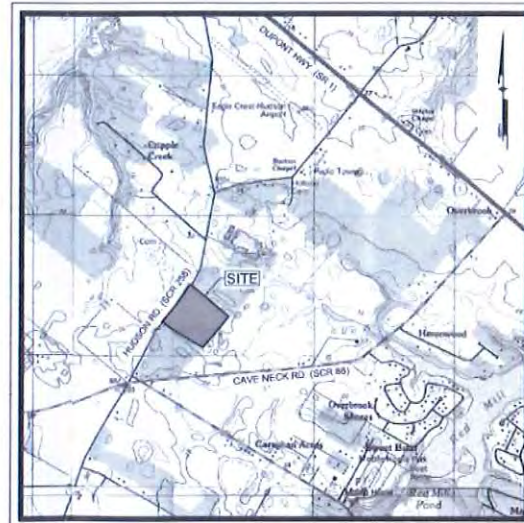
PENNONI ASSOCIATES INC.
16372 Davidson Drive
Milton, DE 19968
T 302.684.8030 F 302.684.8054

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR. DISCREPANCIES BEFORE PROCEEDING WITH WORK.

MAJESTIC MEADOWS
COVER SHEET
KEY PROPERTIES GROUP, LLC



SOILS / FEMA MAP
Scale: 1" = 1000'



USGS LOCATION MAP
Scale: 1" = 2000'

ZONING DATA TABLE - SUSSEX COUNTY

Table with columns: Requirement and Proposed. Lists zoning requirements for R-1 Residential Single Family lots, including lot size, setbacks, and height.

TRIP GENERATION - HUDSON ROAD (SCR 258)



ROAD TRAFFIC DATA:

FUNCTIONAL CLASSIFICATION - SCR 258 (HUDSON RD) - MINOR COLLECTOR
POSTED SPEED LIMIT - 40 MPH
AADT = 974 TRIPS (FROM 2016 DELDOT TRAFFIC SUMMARY)

SITE TRAFFIC DATA:

SOURCE: ITE GENERATION MANUAL 9TH EDITION
26 DWELLING UNITS
50% ENTERING-50% EXITING
LN(T) = 0.92LN(0) + 2.72

PREPARED BY: PENNONI ASSOCIATES INC.



18072 Davidson Drive
Milton, DE 19968
T 302.684.8030
F 302.684.8054

CALL BEFORE YOU DIG
Call Miss Utility of Delmarva
800-282-8555

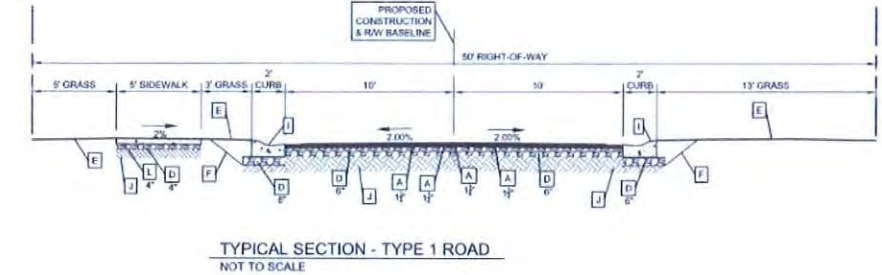
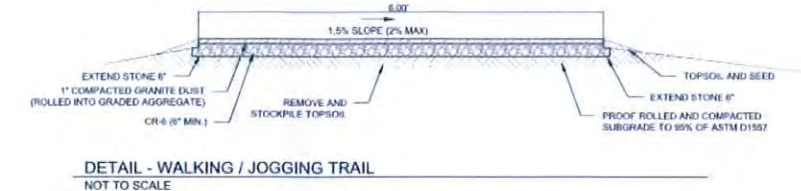
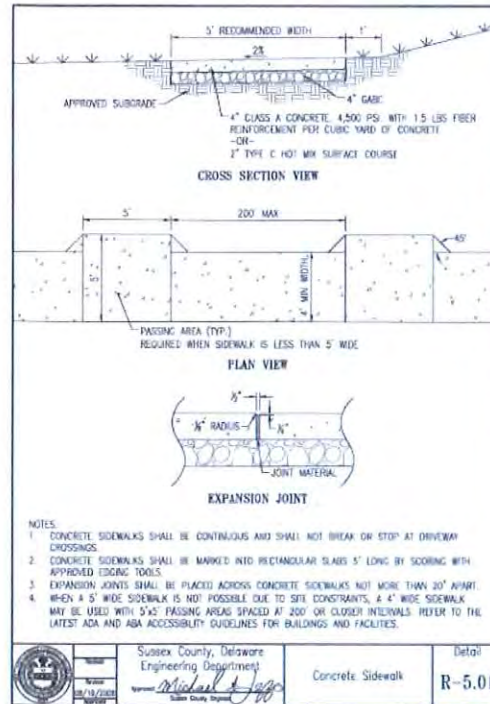
Approval table with columns: Name, Date, Title. Includes signatures for Sussex Conservation District, Pennoni Associates, and Key Properties Group.

ENGINEER CERTIFICATION
IT IS HEREBY CERTIFIED THAT I AM A REGISTERED ENGINEER IN THE STATE OF DELAWARE...

DEVELOPER CERTIFICATION
I HEREBY CERTIFY THAT I AM THE DEVELOPER OF THE PROPERTY DESCRIBED AS SHOWN ON THIS PLAN...

Revision table with columns: No., Date, Description. Lists revisions to the cover sheet.

Project information table with fields: Project Name (KYPG1701), Date (October 2017), Drawing Scale (AS SHOWN), Drawn By (TPM), Approved By (AMD), Sheet Number (RP0001), and Sheet Count (1 of 5).



CONDITIONS FOR APPROVAL:

PRELIMINARY APPROVAL WAS GRANTED BY SUSSEX COUNTY PLANNING COMMISSION AT THEIR MEETING ON JUNE 22, 2017 SUBJECT TO THE FOLLOWING CONDITIONS:

- THERE SHALL BE NO MORE THAN 26 LOTS IN THE SUBDIVISION.
- ALL LOTS WILL BE SERVED BY PRIVATE INDIVIDUAL ON-SITE WELLS AND SEPTIC SYSTEMS PERMITTED BY DNREC.
- THE APPLICANT SHALL FORM A HOMEOWNERS ASSOCIATION TO BE RESPONSIBLE FOR THE MAINTENANCE OF STREETS, SIDEWALKS, AMENITIES, ROADS, BUFFERS, STORMWATER MANAGEMENT AREAS AND EROSION AND SEDIMENTATION CONTROL FACILITIES.
- THE STORMWATER MANAGEMENT SYSTEM SHALL MEET OR EXCEED THE REQUIREMENTS OF THE STATE AND COUNTY. THE FINAL SITE PLAN SHALL OBTAIN THE APPROVAL OF THE SUSSEX CONSERVATION DISTRICT FOR THE DESIGN AND LOCATION OF ALL STORMWATER MANAGEMENT AREAS AND EROSION AND SEDIMENTATION CONTROL FACILITIES.
- A 20 FOOT FORESTED OR LANDSCAPED BUFFER SHALL BE INSTALLED ALONG THE PERIMETER OF THE PROJECT. THE FINAL SITE PLAN SHALL CONTAIN A LANDSCAPE PLAN FOR THESE AREAS.
- ALL ENTRANCES AND ROADWAY IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DELDOT'S REQUIREMENTS.
- INTERIOR STREET DESIGN SHALL MEET OR EXCEED SUSSEX COUNTY STANDARDS AND SHALL INCLUDE SIDEWALKS ON ONE SIDE OF THE STREET. STREET LIGHTING SHALL BE INCLUDED AS PROVIDED BY THE APPLICANT.
- STREET NAMING AND ADDRESSING SHALL BE SUBJECT TO THE REVIEW AND APPROVAL OF THE COUNTY MAPPING AND ADDRESSING DEPARTMENT.
- THE LOCATION FOR A SCHOOL BUS STOP SHALL BE COORDINATED WITH THE LOCAL SCHOOL DISTRICT'S TRANSPORTATION MANAGER. THE LOCATION OF THE BUS STOP SHALL BE SHOWN ON THE FINAL SITE PLAN.
- A SIDEWALK ON ONE SIDE OF THE ROAD SHALL BE INSTALLED TO ALLOW FOR SCHOOL-AGE CHILDREN TO WALK TO THE ENTRANCE TO CATCH THE BUS.
- RECREATION AREAS AND AMENITIES SHALL BE COMPLETED WITHIN THE PROJECT LATER THAN THE ISSUANCES OF THE 20TH CERTIFICATE OF OCCUPANCY.
- A WALKING TRAIL SHALL BE INSTALLED AS PROPOSED BY THE APPLICANT.
- THE FINAL SITE PLAN SHALL INCLUDE A LANDSCAPING PLAN WHICH CLEARLY DELINEATES ALL UNDISTURBED TREES AND FORESTED AREAS.
- A REVISED PRELIMINARY SITE PLAN EITHER DEPICTING OR NOTING THESE CONDITIONS SHALL BE SUBMITTED TO THE SUSSEX COUNTY OFFICE OF PLANNING AND ZONING.
- THE FINAL SITE PLAN SHALL BE SUBJECT TO THE REVIEW AND APPROVAL OF THE PLANNING AND ZONING COMMISSION.

GENERAL NOTES:

- ALL PROPOSED ROADS SHOWN ARE PRIVATE AND ARE TO BE MAINTAINED BY THE DEVELOPER UNTIL SUCH TIME AS A HOMEOWNERS ASSOCIATION CAN PROVIDE FOR SAID MAINTENANCE. THE STATE AND COUNTY ASSUMES NO RESPONSIBILITY FOR THE FUTURE MAINTENANCE OF THESE STREETS.
- STORMWATER SHALL BE HANDLED THROUGH THE DESIGN OF WET AND INFILTRATION PONDS THAT WILL BE LOCATED ON SITE. THE MAINTENANCE OF ALL STORMWATER MANAGEMENT FACILITIES CONSTRUCTED WITHIN THIS SITE SHALL BE THE RESPONSIBILITY OF THE DEVELOPER UNTIL SUCH TIME AS A HOMEOWNERS ASSOCIATION CAN PROVIDE FOR SAID MAINTENANCE.
- BASED ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM: 10050C188K, EFFECTIVE DATE: MARCH 18, 2015), THE SUBJECT PROPERTY IS LOCATED IN FLOOD ZONE "X", UNSHADED, WHICH IS AN AREA DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN.
- NO WETLANDS EXIST ON THIS SITE PER THE US FISH AND WILDLIFE NATIONAL WETLAND INVENTORY ONLINE MAPPING.
- THE DEVELOPMENT WILL BE BUILT IN A SINGLE PHASE.
- ALL SUBDIVISION LOTS SHALL HAVE FIVE-FOOT WIDE PUBLIC UTILITY EASEMENTS ALONG LOT LINES FOR A TOTAL EASEMENT WIDTH OF AT LEAST TEN (10) FEET ALONG A LOT LINE COMMON TO TWO LOTS. EASEMENTS ALONG PERIMETER BOUNDARIES OF THE SUBDIVISION SHALL BE TEN (10) FEET IN WIDTH ON THE INTERIOR SIDE OF THE BOUNDARY. NO BUILDING, STRUCTURE OR OTHER PERMANENT OBSTRUCTION SHALL BE PLACED ON ANY EASEMENT.
- THE SUSSEX CONSERVATION DISTRICT RESERVES THE RIGHT TO ADD, DELETE, OR MODIFY ANY EROSION AND SEDIMENT CONTROL MEASURES AS THEY DEEM NECESSARY.
- ALL DISTURBED AREAS WITHIN THE RIGHT-OF-WAY BUT NOT IN PAVEMENT SHALL BE TOPSOILED (2" MINIMUM), FERTILIZED AND SEED.
- THE PROPOSED ENTRANCES ARE PROPOSED ONLY AND ARE SUBJECT TO REVIEW AND APPROVAL BY THE DELAWARE DEPARTMENT OF TRANSPORTATION BEFORE A CONSTRUCTION PERMIT IS ISSUED.
- A 72 HOUR (MINIMUM) NOTICE SHALL BE GIVEN TO THE DISTRICT PERMIT SUPERVISOR PRIOR TO STARTING ENTRANCE CONSTRUCTION.
- MISS UTILITY SHALL BE NOTIFIED THREE (3) DAYS PRIOR TO EXCAVATION.
- ALL SIGNING FOR MAINTENANCE OF TRAFFIC IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL FOLLOW THE GUIDELINES SHOWN IN LATEST EDITION OF "DELAWARE TRAFFIC CONTROLS FOR STREETS AND HIGHWAY CONSTRUCTION, MAINTENANCE, UTILITY, AND EMERGENCY OPERATIONS".
- DESIGN, FABRICATION, AND INSTALLATION OF ALL PERMANENT SIGNING SHALL BE AS OUTLINED IN THE "GUIDE FOR FABRICATION AND INSTALLATION OF TRAFFIC CONTROL DEVICES".
- THIS PROPERTY IS LOCATED IN THE VICINITY OF LAND USED PRIMARILY FOR AGRICULTURAL PURPOSES UPON WHICH NORMAL AGRICULTURAL USES AND ACTIVITIES HAVE EXCEEDED THE HIGHEST PRIORITY USE STATUS. IT CAN BE ANTICIPATED THAT SUCH AGRICULTURAL USES AND ACTIVITIES MAY NOW OR IN THE FUTURE INVOLVE DUST, NOISE, MANURE AND OTHER ODOORS. THE USE OF AGRICULTURAL CHEMICALS, AND NIGHTTIME FARMING OPERATIONS. THE USE AND ENJOYMENT OF THIS PROPERTY IS EXPRESSLY CONDITIONED ON ANY ANNOUNCEMENT OR SIGNIFICATION WHICH MAY RESULT FROM ANY SUCH AGRICULTURAL USES AND ACTIVITIES.
- NO BUILDING PERMIT SHALL BE ISSUED UNTIL EITHER ALL REQUIRED IMPROVEMENTS HAVE BEEN INSTALLED, CONSTRUCTED, OR PLACED FOR THE LOT FOR WHICH THE PERMIT WILL BE ISSUED IN A MANNER ACCEPTABLE BY THE COUNTY AND STATE, OR UNTIL THE DEVELOPER FILES A PERFORMANCE BOND OR OTHER GUARANTEE WITH THE COUNTY FOR ANY UNCOMPLETED PUBLIC OR PRIVATE STREET OR OTHER REQUIRED IMPROVEMENT.
- ALL PROPOSED FOREST BUFFERS ARE TO BE MAINTAINED BY THE DEVELOPER UNTIL SUCH TIME AS A HOMEOWNERS ASSOCIATION CAN PROVIDE FOR SAID MAINTENANCE.
- ALL LOTS TO HAVE ACCESS FROM INTERNAL SUBDIVISION STREETS AND THAT NO DIRECT ACCESS FROM SCR #258 WILL BE PERMITTED.
- ALL FIRE LANES, FIRE HYDRANTS AND FIRE DEPARTMENT CONNECTIONS SHALL BE MARKED IN ACCORDANCE WITH THE DELAWARE STATE FIRE PREVENTION REGULATIONS.
- ALL SINGLE FAMILY HOMES TO BE WOOD FRAME CONSTRUCTION WITH A MAXIMUM BUILDING HEIGHT OF THREE STORIES, NOT TO EXCEED 42'.
- COMMON AREA AN AREA OWNED AND USED IN COMMON BY RESIDENTS OF THE SUBDIVISION FOR RECREATION, LANDSCAPING AND STORM WATER MANAGEMENT.
- EXISTING UTILITIES ARE SHOWN IN ACCORDANCE WITH THE BEST AVAILABLE INFORMATION. COMPLETENESS OR CORRECTNESS THEREOF IS NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANIES INVOLVED IN ORDER TO SECURE THE MOST ACCURATE INFORMATION AVAILABLE AS TO UTILITY LOCATION AND ELEVATION. NO CONSTRUCTION AROUND OR ADJACENT TO UTILITIES SHALL BEGIN WITHOUT NOTIFYING THEIR OWNERS AT LEAST 48 HOURS IN ADVANCE. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICES AND ANY DAMAGE DONE TO THEM DUE TO HIS/HER NEGLIGENCE SHALL BE IMMEDIATELY AND COMPLETELY REPAIRED AT THE CONTRACTOR'S EXPENSE. TO LOCATE EXISTING UTILITIES IN THE FIELD PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT MISS UTILITY OF DELAWARE.
- NO EASEMENTS WERE VERIFIED PER THIS PLAN.
- THE PROPOSED SIGN IS NOT APPROVED AS PART OF THIS SITE PLAN. A SEPARATE SUSSEX COUNTY PERMIT IS REQUIRED.
- DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL WORK MUST BE PERFORMED IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AS AMENDED AND ALL RULES AND REGULATIONS THERE TO APPLICABLE.
- ALL WALKING PATHS SHOWN THROUGHOUT THE OPEN SPACE ARE ILLUSTRATIVELY AND ARE SUBJECT TO CHANGE BY THE DEVELOPER OR HOMEOWNERS ASSOCIATION.
- ALL OPEN SPACE AREAS ON SITE ARE INTENDED FOR LANDSCAPE, RECREATION AND STORMWATER MANAGEMENT PRACTICES AND ARE THE RESPONSIBILITY OF THE DEVELOPER UNTIL A HOMEOWNERS ASSOCIATION CAN ASSUME OWNERSHIP AND RESPONSIBILITY FOR THE OPEN SPACE.

DELDOT RECORD / SITE PLAN NOTES:

- ALL ENTRANCES SHALL CONFORM TO THE DELAWARE DEPARTMENT OF TRANSPORTATION'S (DELDOT) CURRENT DEVELOPMENT COORDINATION MANUAL (CDM) AND SHALL BE SUBJECT TO ITS APPROVAL.
- SHARPER 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 RIGHT TRIANGLE AREA ESTABLISHED ON THIS PLAN. IF THE ESTABLISHED DEPARTURE SIGHT TRIANGLE AREA IS OUTSIDE THE RIGHT-OF-WAY OR INTERFERES ONTO AN ADJACENT PROPERTY OWNER'S LAND, A RIGHT EASEMENT SHOULD BE ESTABLISHED AND REQUIRED 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 ADJACENT EXISTING FACILITIES, THE DEVELOPER, THE PROPERTY OWNERS OR BOTH ASSOCIATED WITH THIS PROJECT, SHALL BE RESPONSIBLE TO REMOVE ANY EXISTING ROAD TRAIL CONNECTIONS LOCATED ALONG ADJACENT PROPERTIES, AND RESTORE THE AREA TO GRASS. SUCH ACTIONS SHALL BE COMPLETED AT DELDOT'S DISCRETION, AND IN CONFORMANCE WITH DELDOT'S "SHARED-USE PATH AND/OR SIDEWALK TERMINATION POLICY".
- SUBDIVISION STREETS CONSTRUCTED WITHIN THE LOTS OF THE RIGHT-OF-WAY ARE PRIVATE AS SHOWN ON THIS PLAN AND ARE TO BE MAINTAINED BY THE DEVELOPER, PROPERTY OWNERS OR BOTH. THE STATE OF DELAWARE ASSUMES NO MAINTENANCE RESPONSIBILITIES FOR THE FUTURE MAINTENANCE OF THESE STREETS.
- THE SHARED-USE PATH SHALL BE THE RESPONSIBILITY OF THE DEVELOPER, THE PROPERTY OWNERS, OR BOTH. THE STATE OF DELAWARE ASSUMES NO RESPONSIBILITY FOR THE FUTURE MAINTENANCE FOR THE SHARED-USE PATH.
- THE DEVELOPER SHALL BE REQUIRED TO FURNISH AND PLACE RIGHT-OF-WAY MARKERS TO PROVIDE A PERMANENT REFERENCE FOR THE ESTABLISHING THE RIGHT-OF-WAY AND PROPERTY CORNERS ON LOCAL AND HIGHER ORDER FRONTAGE ROADS. RIGHT-OF-WAY MARKERS SHALL BE SET AND/OR PLACED ALONG THE FRONTAGE ROAD RIGHT-OF-WAY AT PROPERTY CORNERS AND AT EACH CHANGE IN RIGHT-OF-WAY ALIGNMENT IN ACCORDANCE WITH SECTION 3.2.4.2 OF THE DEVELOPMENT COORDINATION MANUAL.
- ANY FUTURE PATH FROM THE SHARED USE PATH INTO THE SITE SHALL BE ADA COMPLIANT WITHIN THE RIGHT-OF-WAY AND THE PERMANENT EASEMENT.

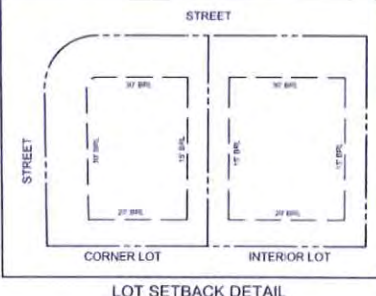
- | | |
|----------|---|
| A | ITEM 401005 - SUPERPAVE TYPE C PG 64-22 |
| B | NOT USED |
| C | NOT USED |
| D | ITEM 201001 - GRADED AGGREGATE BASE COURSE, TYPE B |
| E | ITEM 008004 - TOPSOIL, 6" DEPTH OR ITEM 008013 - TOPSOILING, 6" DEPTH |
| F | ITEM 608014 - PERMANENT GRASS SEEDING, DRY GROUND |
| G | ITEM 208006 - BORROW, TYPE F |
| H | ITEM 008020 - EROSION CONTROL, BLANKET MULCH |
| I | MODIFIED PORTLAND CEMENT CONCRETE CURB - TYPE 2 (DETAIL E, CS6001) |
| J | INTEGRAL PCC CURB AND GUTTER - TYPE 2 (DETAIL E, CS6001) |
| K | PROOF ROLLED AND COMPACTED SUBGRADE TO 98% OF ASTM D1557 |
| L | ITEM 401006 - SUPERPAVE TYPE C PG 64-22, WEDGE |
| | CONCRETE SIDEWALK - 4" CLASS A CONCRETE, 4,500 PSI WITH 1.5 LBS FIBER REINFORCEMENT PER CY (DETAIL L, CS6001) |

SURVEY NOTES:

BOUNDARY SURVEY PERFORMED BY MERIDIAN CONSULTING ENGINEERS, L.L.C.
 2641 BROADBILL ROAD
 MILTON, DE 19968
 PHONE: (302) 684-4766
 FAX: (302) 684-8228

BOUNDARY SURVEY DATED: MAY 21, 2011
 HORIZONTAL DATUM: NAD 83 (1983 NORTH AMERICAN DATUM)

NOTES:
 1. THIS PLAN AND SURVEY DOES NOT VERIFY THE EXISTENCE OR NON-EXISTENCE OF RIGHT-OF-WAYS AND/OR EASEMENTS PERTAINING TO THIS PROPERTY.
 2. NO TITLE SEARCH PROVIDED OR STIPULATED.
 3. DEED BOOK REFERENCE: DB 2816 PG. 14
 4. PLAT BOOK REFERENCES:
 PB. 79, PG. 70 (BOUNDARY SURVEY)
 PB. 80, PG. 250 (DRIVER ROCK GLEN RECORD PLAT)
 5. THE PROPERTY IS IN ZONE "X" OF THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 10050C188K WHICH HAS AN EFFECTIVE DATE OF MARCH 18, 2015 AND IS NOT IN A SPECIAL FLOOD HAZARD AREA. AN ELEVATION CERTIFICATE MAY BE HELD TO VERIFY THIS DETERMINATION OR APPLY FOR AN AMENDMENT FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY.
 6. BOUNDARY INFORMATION SHOWN ON THIS PLAN IS FROM MERIDIAN SURVEY DATED MAY 21, 2011. PROPOSED SUBDIVISION LINES HAVE BEEN CREATED BY PENNON ASSOCIATES, INC.



PENNON ASSOCIATES, INC.
 1617Z Division Drive
 Milton, DE 19968
 T 302.684.8030 F 302.684.8054

Michael J. Jeff
 PE, PLS, PLS-CP
 02/13/2013

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND DISCREPANCIES BEFORE PROCEEDING WITH WORK

MAJESTIC MEADOWS
 SUSSEX COUNTY - BRADDOCK HUNDRED
 HUDSON ROAD (SCR 258), MILTON, DE
 SUSSEX COUNTY TAX MAP, 2-35-22-00-19-00

FINAL SUBDIVISION NOTES AND DETAILS

KEY PROPERTIES GROUP, LLC
 610 MARSHALL STREET
 MILFORD, DELAWARE 19963

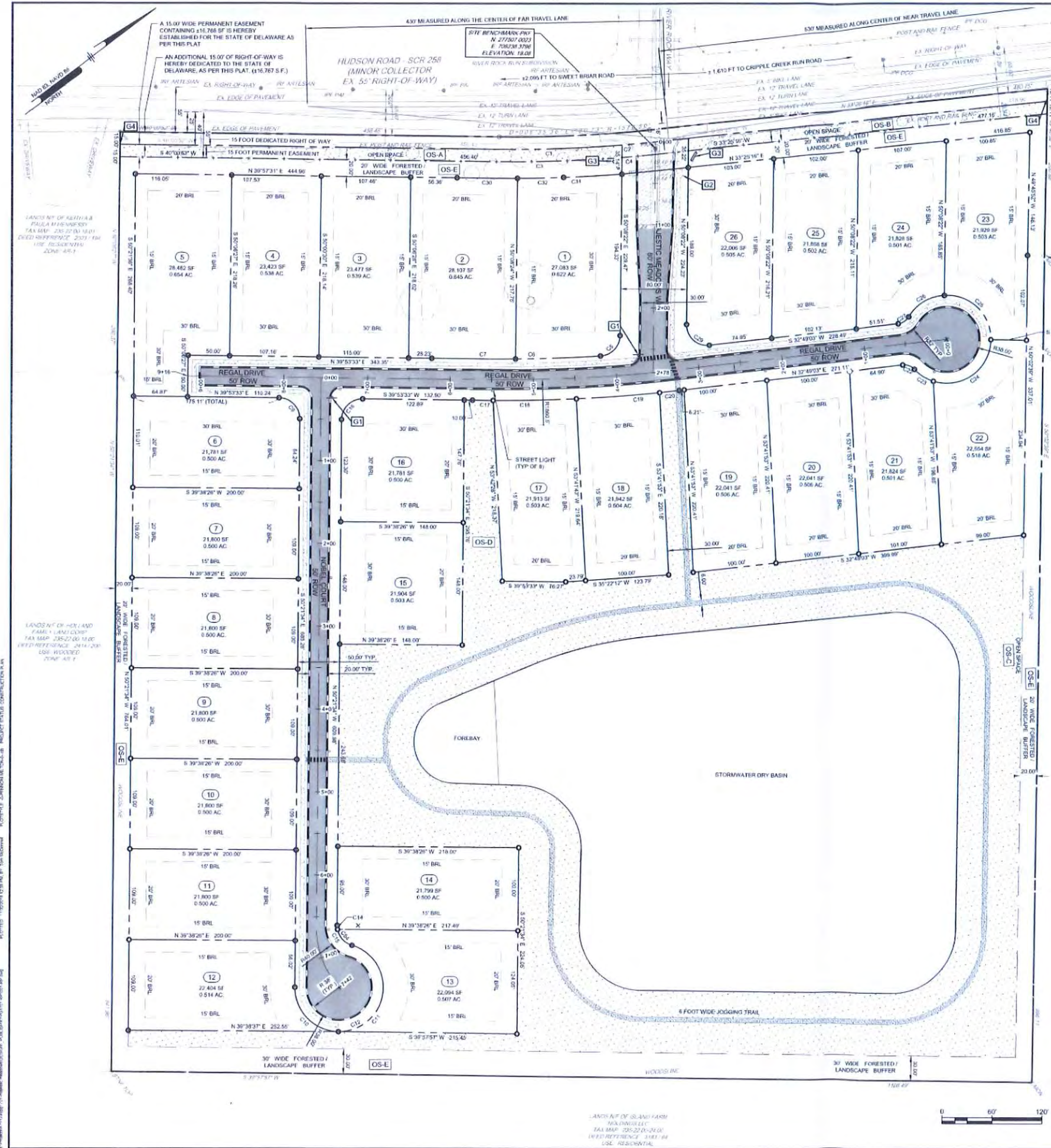
REVISED PER AGENCY COMMENTS	REVISED PER CLIENT	REVISED SUBMITTAL LAYOUT	REVISED PER AGENCY COMMENTS	REVISED PER AGENCY COMMENTS	REVISED	DATE	NO.

PROJECT	KYPG1701
DATE	OCTOBER 2017
DRAWING SCALE	AS SHOWN
DRAWN BY	TPM
APPROVED BY	AMD

RP0002

SHEET# 2 OF 5

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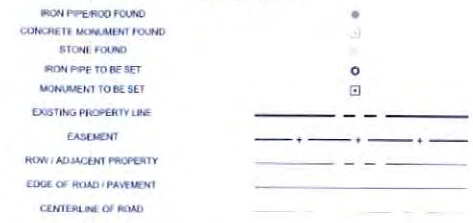
CURVE DATA TABLE					
CURVE #	RADIUS	DELTA	ARC LENGTH	CHORD LENGTH	CHORD BEARING
C1	1565.57	004°32'36"	125.73	125.89	S 37°40'17" W
C2	1565.57	002°03'00"	56.73	56.73	S 34°26'17" W
C3	1600.50	006°35'36"	184.18	184.08	S 30°42'37" W
C4	1600.50	006°35'36"	184.18	184.08	S 30°42'37" W
C5	25.00	085°42'53"	37.40	34.01	N 07°18'50" E
C6	1728.77	007°22'57"	102.06	102.04	N 37°13'18" E
C7	7951.56	000°43'35"	100.80	100.80	N 39°42'48" E
C8	25.00	089°44'53"	39.16	35.28	S 84°49'59" W
C9	53.00	089°30'51"	82.80	74.63	N 84°53'01" E
C10	53.00	164°06'12"	151.80	104.98	N 41°55'31" E
C11	53.00	253°37'07"	234.60	84.87	N 02°49'54" E
C12	25.00	062°04'49"	27.00	25.78	N 87°03'44" E
C13	25.00	011°32'13"	5.03	5.03	S 86°07'41" E
C14	25.00	073°37'02"	30.12	29.96	S 87°19'00" E
C15	25.00	090°10'07"	39.30	35.43	S 05°14'01" E
C16	9704.77	000°38'43"	24.60	24.60	N 40°01'20" E
C17	1916.52	002°59'24"	100.01	100.00	N 38°05'35" E
C18	1865.51	003°02'21"	100.01	100.00	N 35°03'41" E
C19	4447.80	007°16'25"	23.83	23.83	S 37°10'47" W
C20	17.00	053°07'48"	15.76	15.21	S 69°22'57" W
C21	53.00	029°23'37"	27.19	26.89	N 71°15'03" E
C22	53.00	100°39'54"	98.61	84.89	N 03°15'18" E
C23	53.00	093°49'07"	86.78	77.41	S 83°02'51" W
C24	53.00	056°27'06"	52.22	50.13	S 07°54'48" W
C25	17.00	026°33'54"	7.88	7.61	N 19°32'00" E
C26	25.00	097°02'35"	42.34	37.48	N 81°20'27" E
C27	18002.23	000°13'51"	72.54	72.54	S 39°47'35" E
C28	1618.49	004°28'03"	125.20	125.20	N 37°39'33" E
C29	1620.50	005°13'37"	147.80	147.79	N 37°23'33" E

OPEN SPACE TABLE		
AREA (S.F.)	AREA (AC.)	PURPOSE
OS-A	8,062	0.21 ACTIVE
OS-B	6,498	0.15 ACTIVE
OS-C	202,643	4.65 ACTIVE
OS-D	8,949	0.21 ACTIVE
OS-E	97,551	2.23 LANDSCAPE BUFFER

SITE KEYED NOTES

- G1 CO-POST STOP SIGN (81-1) 36" X 36" AND STREET SIGN
- G2 BUS STOP
- G3 DEVELOPMENT SIGN
- G4 IRON PIPE TO BE SET (TYP.)

LEGEND



ENGINEER CERTIFICATION
 IT IS HEREBY CERTIFIED THAT I AM A REGISTERED ENGINEER IN THE STATE OF DELAWARE, THAT THE INFORMATION SHOWN HEREON HAS BEEN PREPARED UNDER MY SUPERVISION, AND TO MY BEST KNOWLEDGE AND BELIEF REPRESENTS CORRECT ENGINEERING PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.

Signature: Alan M. Decker
 Date: 10/17/17
 Title: Professional Engineer
 License No.: 69417771
 Pennoni Associates, Inc.
 18072 Davidson Drive, Milton, DE 19968
 (302) 684-8030

OWNER'S AND DEVELOPER'S CERTIFICATION
 IT IS HEREBY CERTIFIED THAT I AM THE OWNER/DEVELOPER OF THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN. THE PLAN WAS MADE AT MY DIRECTION, THAT I ACKNOWLEDGE THE SAME TO BE MY ACT. IT IS MY DESIRE TO HAVE THE PLAN RECORDED AS SHOWN AND IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS.

Signature: [Signature]
 Date: 10/17/17
 Title: [Title]
 Key Properties Group, LLC
 610 Marshall Street
 Milford, Delaware 19963
 (302) 265-2257



ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

MAJESTIC MEADOWS
 SUSSEX COUNTY - BROADKILL HUNDRED
 HUDSON ROAD (SCR 258), MILTON, DE
 SUSSEX COUNTY TAX MAP: 2-35-27-00-19-00

RECORD PLAN

KEY PROPERTIES GROUP, LLC
 610 MARSHALL STREET
 MILFORD, DELAWARE 19963

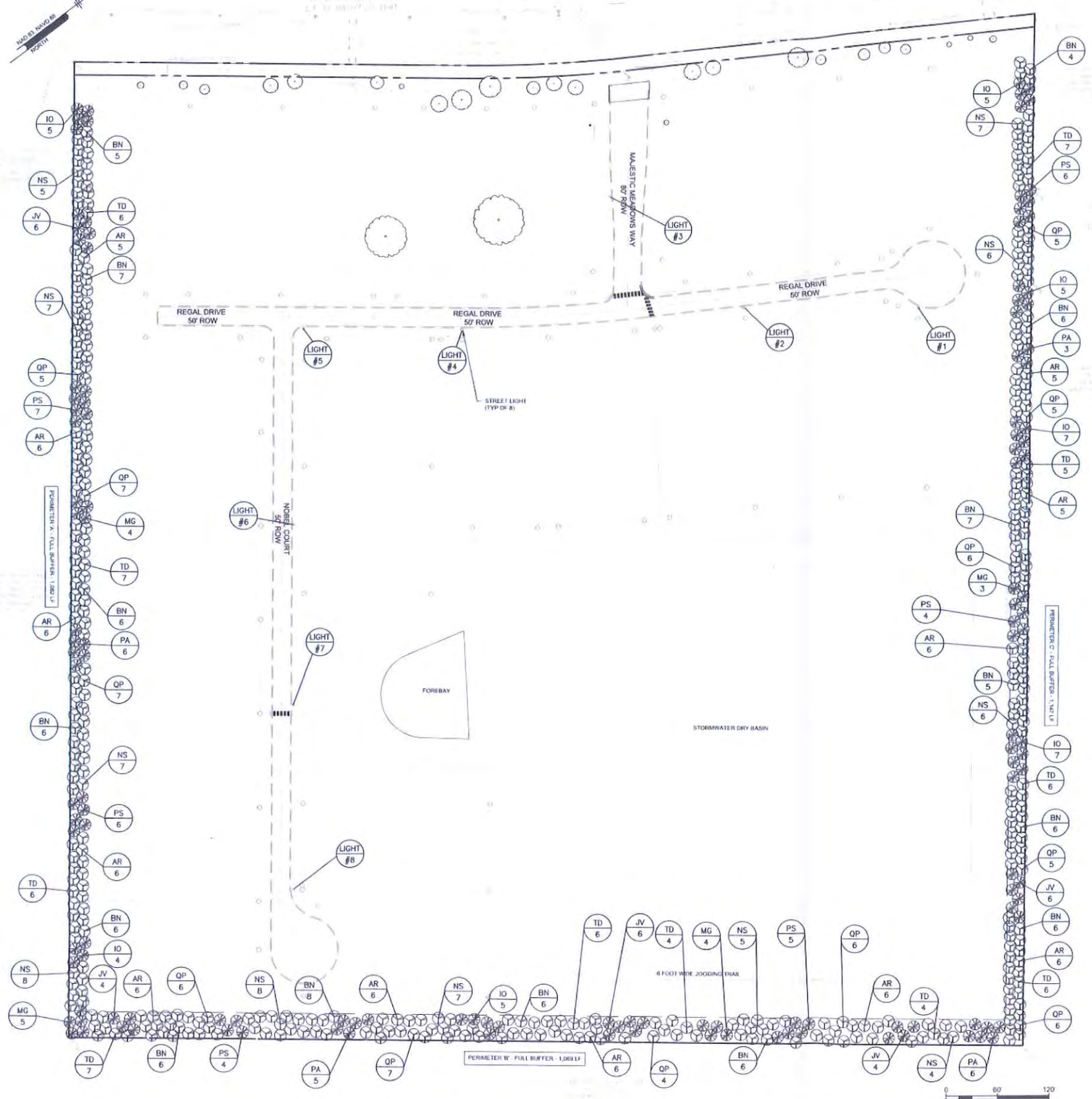
TPM	REVISED PER AGENCY COMMENTS	DATE	BY
7	REVISED PER CLIENT	7-15-16	MP
6	REVISED PER CLIENT	6-27-16	MP
5	REVISED SUBDIVISION LAYOUT	5-13-16	BRD
4	REVISED PER AGENCY COMMENTS	1-28-16	JRE
3	REVISED PER AGENCY COMMENTS	1-28-16	JRE
2	REVISED PER AGENCY COMMENTS	12-28-17	JRE
1	REVISED PER AGENCY COMMENTS		JRE
NO	REVISIONS		

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT TO BE REPRODUCED OR REUSED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF PENNONI ASSOCIATES. ANY REUSE WITHOUT WRITTEN PERMISSION OF PENNONI ASSOCIATES SHALL BE AT USER'S SOLE RISK AND WITHOUT LIABILITY TO PENNONI ASSOCIATES. PENNONI ASSOCIATES, ITS ENGINEERS, ARCHITECTS, AND OTHER PROFESSIONALS ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING FROM THEIR WORK.

PROJECT: KYPG1701
 DATE: OCTOBER 2017
 DRAWING SCALE: 1"=60'
 SHOWN BY: TPM
 APPROVED BY: AMD

RP1001

SHEETS 3 OF 5



LEGEND

EXISTING

- PLANT LABEL
- LIGHTING LABEL
- STREET LIGHT
- TREE TO BE PRESERVED
- SIDEWALK / PATH

PROPOSED

- WA 4 = SPECIES, 4 = QUANTITY
- LIGHT #1
- ⊙
- ◻

LANDSCAPE CERTIFICATION
 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 LAWS OF THE STATE OF DELAWARE

PETER J. STONE, RLA
 PENNONI ASSOCIATES INC.
 8818 CENTRE PARK DRIVE, SUITE 200
 COLUMBIA, MD 21045 - (443) 537-2721

Pennonni

PENNONI ASSOCIATES INC.
 18072 Davidson Drive
 Milford, DE 19968
 T 302.684.8030 F 302.684.8054



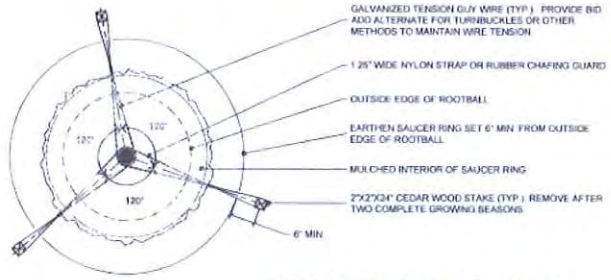
MAJESTIC MEADOWS
 SUSSEX COUNTY - BROADKELL H-ANDRED
 HUDSON ROAD (SCR 298), MILFORD, DE
 SUSSEX COUNTY TAX MAP: 2-35-22-00-19-00

LANDSCAPE & LIGHTING PLAN

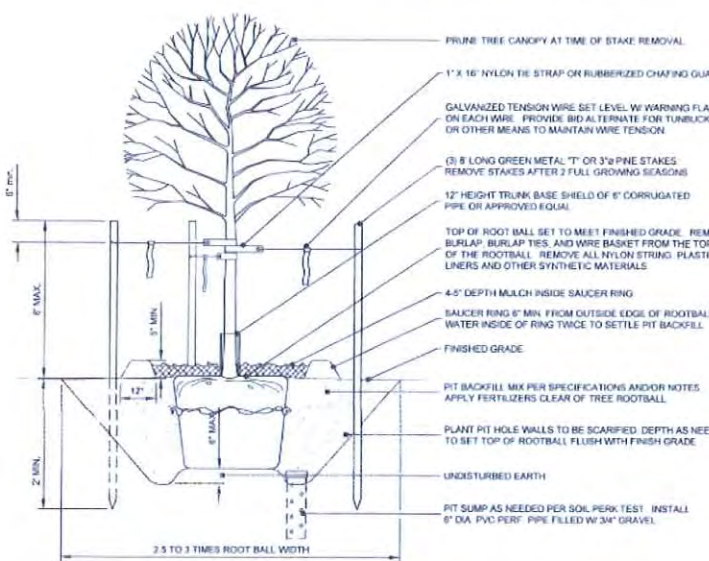
KEY PROPERTIES GROUP, LLC
 810 MARSHALL STREET
 MILFORD, DELAWARE 19963

NO.	DATE	REVISION
1	11/20/16	REVISED PER SCD COMMENTS
2	12/20/16	REVISED PER SCD COMMENTS
3	1/20/17	REVISED PER SCD COMMENTS
4	3/20/17	REVISED PER SCD COMMENTS
5	10/20/17	REVISED PER SCD COMMENTS

PROJECT	KYPG1701
DATE	OCTOBER 2017
DRAWING SCALE	1"=60'
DRAWN BY	MP/TPM
APPROVED BY	AMD
CS2001	
SHEET # 4 OF 5	



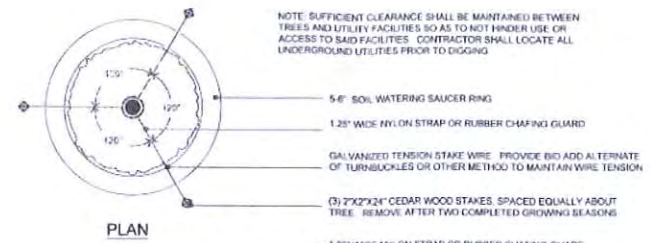
PLAN
NOTE: SUFFICIENT CLEARANCE SHALL BE MAINTAINED BETWEEN TREES AND UTILITY FACILITIES SO AS TO NOT HINDER USE OR ACCESS TO SAID FACILITIES. CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES PRIOR TO DIGGING.



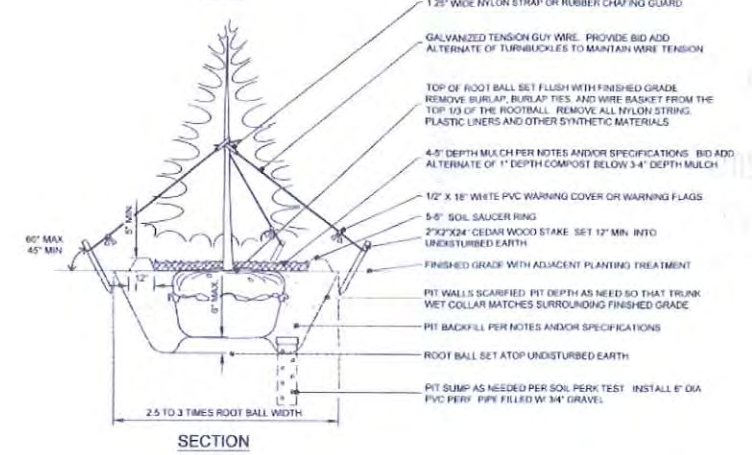
SECTION
2.5 TO 3 TIMES ROOT BALL WIDTH

DETAIL - CANOPY TREE PLANTING & GUYING
NOT TO SCALE

1
CS2002



PLAN
NOTE: SUFFICIENT CLEARANCE SHALL BE MAINTAINED BETWEEN TREES AND UTILITY FACILITIES SO AS TO NOT HINDER USE OR ACCESS TO SAID FACILITIES. CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES PRIOR TO DIGGING.

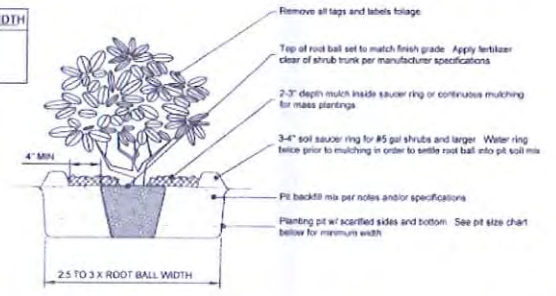


SECTION
2.5 TO 3 TIMES ROOT BALL WIDTH

DETAIL - EVERGREEN TREE PLANTING & STAKING
NOT TO SCALE

2
CS2002

SHRUB SIZE	MIN. PIT WIDTH
#1 GALLON	18"
#3 GALLON	30"
#5 GALLON	42"



DETAIL - SHRUB PLANTING
NOT TO SCALE

3
CS2002

Buffer	Requirements	No. Required	No. Provided
A	FORESTED/LANDSCAPE STRIP A - 1,082 LF		
	Deciduous Tree	11 per 100 LF	115
	Evergreen Tree	4 per 100 LF	43
B	FORESTED/LANDSCAPE STRIP B - 1,069 LF		
	Deciduous Tree	11 per 100 LF	115
	Evergreen Tree	4 per 100 LF	43
C	FORESTED/LANDSCAPE STRIP C - 1,147 LF		
	Deciduous Tree	11 per 100 LF	128
	Evergreen Tree	4 per 100 LF	46
Total Deciduous Trees Provided		303	303
Total Evergreen Trees Provided		132	132
Total Provided Trees		435	435

LANDSCAPING NOTES

1. QUALITY AND SIZE OF PLANTS, SPREAD OF ROOTS, AND SIZE OF BALLS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS OF THE AMERICAN ASSOCIATION OF NURSERYMEN (AMERICAN STANDARDS FOR NURSERY STOCK).
2. CONTRACTOR SHALL BE REQUIRED TO GUARANTEE ALL PLANT MATERIALS FOR A PERIOD OF ONE YEAR AFTER INSTALLATION IS COMPLETE AND FINAL ACCEPTANCE OF PHASE I SITE WORK HAS BEEN GIVEN. AT THE END OF ONE YEAR ALL PLANT MATERIAL WHICH IS DEAD OR DYING SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE AS ORIGINALLY SPECIFIED.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UTILITIES AND MAY MAKE MINOR ADJUSTMENTS IN SPACING AND/OR LOCATION OF PLANT MATERIALS. CONTRACTOR TO VERIFY "AS BUILT" LOCATION OF ALL UTILITIES.
4. NO SUBSTITUTIONS SHALL BE MADE WITHOUT APPROVAL OF THE OWNER.
5. ALL AREAS NOT STABILIZED IN PAVING OR PLANT MATERIALS SHOULD BE SEEDDED AND MULCHED. (SEE EROSION A REDEMPTION CONTROL PLAN).
6. EVERGREEN TREES SHALL HAVE A FULL, WELL-BRANCHED CONICAL FORM TYPICAL OF THE SPECIES.
7. ALL DECIDUOUS SHADE TREES SHALL BRANCH A MINIMUM OF 12'-0" ABOVE GROUND LEVEL. TREES SHALL BE PLANTED AND STAKED IN ACCORDANCE WITH THE STAKING DETAIL SHOWN.
8. THE FULL EXTENT OF ALL PLANTING BEDS SHALL RECEIVE 4" OF TOPSOIL AND 3" OF BARK MULCH PER SPECIFICATIONS.
9. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTINGS SHOWN ON THIS DRAWING AND AS SPECIFIED.
10. ALL PLANTS SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS THE PLANTS ORIGINAL GRADE BEFORE DIGGING.
11. THE CONTRACTOR IS EXPECTED TO MAINTAIN PLANTINGS, INCLUDING WATERING ALL PLANTS ANY TIME FROM APRIL TO DECEMBER WHEN NATURAL RAINFALL IS LESS THAN ONE INCH PER WEEK.
12. THE DEVELOPER OR HOME OWNERS ASSOCIATION SHALL BEAR THE RESPONSIBILITY OF REPLACING ANY LANDSCAPING WITHIN SUSSEX COUNTY SEWER BASINMENTS THAT IS DESTROYED OR DAMAGED DUE TO SEWER SYSTEM MAINTENANCE, REPAIR, ACCIDENT, OR EXTENSION.
13. THE ACTUAL STREET TREE LOCATION SHALL BE COORDINATED DURING LOT CONSTRUCTION. STREET TREES SHALL BE LOCATED WITHIN A 20 FEET OF THE LOCATION SHOWN ON THE PLAN. A 10 FOOT HORIZONTAL CLEARANCE SHALL BE MAINTAINED FROM ALL WATER AND SEWER LATERALS.
14. THE SUBDIVISION SIDES AND REAR REQUIRE A 30' LANDSCAPE BUFFER MEETING THE FOLLOWING: A PLANTING STRIP AT LEAST 30 FEET WIDE NEAR THE PROPERTY LINE WHICH SHALL INCLUDE TWO CANOPY TREES, FOUR UNDERSTORY TREES AND 10 SHRUBS PER 100' LINEAR FEET OF BUFFER.
15. ALL DECIDUOUS TREES THAT ARE PLANTED TO ESTABLISH THE BUFFER PLANTINGS SHALL HAVE A MINIMUM CALIPER OF 1.5 INCHES AND A MINIMUM HEIGHT OF 50' FEET ABOVE GROUND WHEN PLANTED IN ORDER TO INSURE THAT THE TREES WILL BE CAPABLE OF OBTAINING A MINIMUM HEIGHT OF 10 FEET ABOVE GROUND WITHIN FIVE YEARS OF BEING PLANTED.
16. ALL EVERGREEN TREES THAT ARE PLANTED TO ESTABLISH THE BUFFER PLANTINGS SHALL HAVE A MINIMUM HEIGHT OF FIVE FEET ABOVE GROUND WHEN PLANTED IN ORDER TO INSURE THAT THEY ARE REASONABLY CAPABLE OF ATTAINING A MINIMUM HEIGHT OF 10 FEET ABOVE GROUND WITHIN FIVE YEARS OF BEING PLANTED.
17. THE BUFFER AREA SHALL HAVE A FINAL GRADE THAT CONTAINS A MINIMUM OF FOUR INCHES OF TOPSOIL AND A SUITABLE GRASS MAY PLANTED AS SACRIFICIAL COVER BETWEEN THE BUFFER TREES FOR SOIL STABILIZATION UNTIL THE NEWLY PLANTED TREES BECOME LARGER. THE PLAN MAY SUBSTITUTE WOODCHIPS FOR PLANTED GRASS BETWEEN THE BUFFER TREES IN RESPECT TO BOTH NEWLY PLANTED AND EXISTING TREES, AS DETERMINED BY THE LANDSCAPE ARCHITECT.
18. THE FORESTED AND/OR LANDSCAPE BUFFER SHALL BE INSTALLED WITHIN 18 MONTHS FROM THE DATE SITE WORK IS AUTHORIZED TO COMMENCE, AS DOCUMENTED BY A NOTICE TO PROCEED LETTER FROM THE COMMISSION.
19. THE LAND DEVELOPER SHALL BE HELD RESPONSIBLE FOR THE HEALTH AND SURVIVAL OF THE TREES INCLUDING REGULAR NECESSARY WATERING FOR A MINIMUM OF TWO YEARS OR UNTIL SUCH LATER DATE AS THE MAINTENANCE RESPONSIBILITIES ARE TRANSFERRED TO A HOMEOWNERS ASSOCIATION PROVIDED, HOWEVER, THAT THE DEVELOPER SHALL REPLACE ANY TREES THAT DIE DURING THE MINIMUM TWO-YEAR DEVELOPER MAINTENANCE PRIOR TO TRANSFERRING MAINTENANCE RESPONSIBILITIES TO A HOMEOWNERS ASSOCIATION.
20. THE PERPETUAL MAINTENANCE OF THE BUFFER PLANTINGS BY A HOMEOWNERS ASSOCIATION SHALL BE ASSURED THROUGH THE RESTRICTIVE COVENANTS AND/OR HOMEOWNERS ASSOCIATION DOCUMENTS WHICH ARE OBLIGATORY UPON THE PURCHASERS THROUGH ASSESSMENTS BY THE HOMEOWNERS ASSOCIATION.

SYMBOL	QTY.	SCIENTIFIC/COMMON NAME	SIZE	ROOT	REMARKS
SHADE TREES					
AR	89	ACER RUBRUM 'OCTOBER GLORY' OCTOBER GLORY RED MAPLE	1.5' CAL.	B&B	PLANT AS SHOWN
BN	90	BETULA NEGRA 'HERITAGE' HERITAGE RIVER BIRCH	7-8' HT.	B&B	MULTI-STEM. PLANT AS SHOWN
NS	70	NYSSA SYLVATICA BLACK GUM	1.5' CAL.	B&B	PLANT AS SHOWN
QP	88	QUERCUS PHellos WILLOW OAK	1.5' CAL.	B&B	PLANT AS SHOWN
TC	-	TILIA CORDATA 'GREENSPIRE' GREENSPIRE LINDEN	1.5' CAL.	B&B	PLANT AS SHOWN
TD	64	TAXODIUM DISTICHUM BALD CYPRESS	1.5' CAL.	B&B	PLANT AS SHOWN
FLOWERING TREES					
AG	-	AMELANCHIER x GRANDIFLORA 'AUTUMN BRILLIANCE' AUTUMN BRILLIANCE SERVICE BERRY	6'-8' HT.	B&B	MULTI-STEM. PLANT AS SHOWN
CC	-	CERCIS CANADENSIS REDBUD	6'-8' HT.	B&B	SINGLE STEM. PLANT AS SHOWN
CK	-	CORNUS KOUSA KOUSA DOGWOOD	6'-8' HT.	B&B	PLANT AS SHOWN
LS	-	LAGERSTROEMIA x SIOUX SIOUX CRAPMYRTLE	6'-8' HT.	B&B	MULTI-STEM. PLANT AS SHOWN
PY	-	PRUNUS x YEDOENSIS YOSHINO CHERRY	6'-8' HT.	B&B	PLANT AS SHOWN
EVERGREEN TREES					
IN	-	ILEX 'NELLIE R. STEVENS' NELLIE R. STEVENS HOLLY	6'-8' HT.	B&B	PLANT AS SHOWN
IO	38	ILEX OPACA AMERICAN HOLLY	5'-6' HT.	B&B	PLANT AS SHOWN
JV	26	JUNIPERUS VIRGINIANA EASTERN RED CEDAR	5'-6' HT.	B&B	PLANT AS SHOWN
MG	16	MAGNOLIA GRANDIFLORA SOUTHERN MAGNOLIA	5'-6' HT.	B&B	PLANT AS SHOWN
PA	20	PICEA ABIES NORWAY SPRUCE	5'-6' HT.	B&B	PLANT AS SHOWN
PS	32	PINUS STROBUS WHITE PINE	5'-6' HT.	B&B	PLANT AS SHOWN

* PLANT SPECIES SHOWN ARE A REPRESENTATION OF THE TYPE OF SPECIES TO MEET REQUIREMENTS. SUBSTITUTIONS MAY BE MADE IF NECESSARY DUE TO AVAILABILITY OR COST SO AS TO STILL COMPLY WITH REGULATIONS.
* THE DEVELOPER MAY SUBSTITUTE THE PLANTING TYPES PROVIDED THAT THE REPLACEMENT MEETS THE INTENT OF THE ORIGINAL PLANS AND SATISFIES SUSSEX COUNTY REQUIREMENTS REGARDING THE FORESTED/LANDSCAPED BUFFER.

Pennoni
PENNONI ASSOCIATES INC.
18072 Davidson Drive
Milton, DE 19968
T 302.684.8030 F 302.684.8054

REGISTERED PROFESSIONAL
LANDSCAPE ARCHITECT
STATE OF DELAWARE
No. 3621

MAJESTIC MEADOWS
SUSSEX COUNTY - BRADDOCK HUNDRED
HUDSON ROAD (SCR 258), MILTON, DE
SUSSEX COUNTY TAX MAP 2-35-22.00-19.00

LANDSCAPE & LIGHTING NOTES & DETAILS

KEY PROPERTIES GROUP, LLC
816 MARSHALL STREET
MILFORD, DELAWARE 19963

TPM	TPM	NAF	MP	ARE	ARE	ARE	BY
REVISED PER SDCD COMMENTS	REVISED PER SDCD COMMENTS	REVISED PER SDCD COMMENTS	REVISED PER CLIENT	REVISED PER SDCD COMMENTS	REVISED PER SDCD COMMENTS	REVISED PER ARCHITECT COMMENTS	REVISIONS
11/29/19	10/17/19	8/4/19	7/14/19	1/24/18	1/25/18	12/29/17	DATE
7	6	5	4	3	2	1	NO.

PROJECT: KYPG1701
DATE: OCTOBER 2017
DRAWING SCALE: AS SHOWN
DRAWN BY: MP/TPM
APPROVED BY: AMD

CS2002
SHEET# 5 OF 5

P:\1710\17101219\17101219.dwg 3/28/2018 1:29:44 PM P:\01\ncadwin\... ACUTEVE\LEONARDO\LEONARDO.dwg INSCALE\STATE CONSTRUCTION PLAN
 P:\1710\17101219\17101219.dwg 3/28/2018 1:29:44 PM P:\01\ncadwin\... ACUTEVE\LEONARDO\LEONARDO.dwg INSCALE\STATE CONSTRUCTION PLAN

AMENDED AND RESTATED PLAT OF THE VILLAGES AT RED MILL POND-SOUTH

RECORD PLAN RESIDENTIAL PLANNED COMMUNITY LEWES-REHOBOTH HUNDRED, SUSSEX COUNTY, DELAWARE

DBF PROJECT NO. 1443E001 AUGUST, 2018
REVISED: 10-8-2018

CONDITIONS OF PRELIMINARY PLAN APPROVAL

1. THE APPLICANT SHALL CAUSE TO BE FORMED A HOMEOWNERS' ASSOCIATION TO BE RESPONSIBLE FOR THE MAINTENANCE OF THE STREETS, ROADS, ANY BUFFERS, STORMWATER MANAGEMENT FACILITIES, AND OTHER COMMON AREAS.
2. THE APPLICANT SHALL MAINTAIN AS MANY EXISTING TREES AS POSSIBLE. THE UNDISTURBED FORESTED AREAS SHALL BE SHOWN ON THE FINAL RECORD PLAN.
3. THE DEVELOPMENT SHALL BE SERVED BY CENTRAL WATER AND BY THE SUSSEX COUNTY SEWER SYSTEM.
4. THE STORMWATER MANAGEMENT SYSTEM SHALL MEET OR EXCEED THE REQUIREMENTS OF THE STATE AND COUNTY.
5. ENVIRONMENTAL BUFFERS, AS SHOWN IN FIGURE 8.A OF THE APPLICANT'S EXHIBIT BOOK SHALL BE SHOWN ON THE FINAL RECORD PLAN. THIS INCLUDES A BUFFER OF A LEAST 100-FOOT FROM RED MILL POND AND 25-FOOT BUFFERS FROM ALL HIGH-TIDAL WETLANDS.
6. NO WETLANDS SHALL BE INCLUDED WITHIN ANY LOT LINES.
7. ALL ENTRANCES AND ROADWAY IMPROVEMENTS SHALL BE CONSTRUCTED OR FUNDED IN ACCORDANCE WITH ALL OF DELDOT'S REQUIREMENTS. IN ADDITION, THE DEVELOPER SHALL COMPLY WITH ANY ADDITIONAL OR FUTURE DELDOT REQUIREMENTS CONCERNING THE PROJECT. THIS INCLUDES ANY REQUIREMENTS CONCERNING THE RAILROAD TRACK THAT RUNS THROUGH THE PROJECT.
8. A SYSTEM OF STREET LIGHTING SHALL BE PROVIDED THROUGHOUT THE PROJECT. THE LOCATION OF ALL STREETLIGHTS SHALL BE SHOWN ON THE FINAL RECORD PLAN.
9. THE NETWORK OF SIDEWALKS, NATURE TRAILS, AND WALKWAYS SHOWN ON THIS RECORD PLAN SUPERSEDES FIGURE 9.1 OF THE PRELIMINARY EXHIBIT BOOK AND SATISFIES CONDITION 9 OF THE PRELIMINARY APPROVAL DATED JUNE, 11 2004.
10. THE USE OF RED MILL POND FROM THIS PROJECT SHALL BE LIMITED TO HIGH-MOTORIZED BOATS, SUCH AS CANOES AND KAYAKS, WITH THE EXCEPTION OF THE EXISTING HOPKINS HOMESTEAD AND NO MORE THAN 8 ELECTRIC BOATS OWNED AND OPERATED BY THE DEVELOPER OF THE HOMEOWNER'S ASSOCIATION.
11. ALL AMENITIES AND RECREATIONAL FACILITIES SHALL BE CONSTRUCTED AND OPEN FOR USE BY THE RESIDENTS OF THE DEVELOPMENT WITHIN 2 YEARS OF THE ISSUANCE OF THE FIRST BUILDING PERMIT.
12. AS REQUESTED BY THE LEWES FIRE DEPARTMENT, THE AREAS OF THE PROJECT SEPARATED BY THE RAILROAD SHALL BE GIVEN NAMES THAT IDENTIFY EACH AREA TO AVOID EMERGENCY RESPONSE DELAYS. ALSO, EACH HOUSE SHALL HAVE ADDRESS NUMBERS AT LEAST 3 INCHES IN SIZE.
13. THE FINAL RECORD PLAN SHALL SHOW ALL REQUIRED BUFFERS FROM NEIGHBORING LANDS USED FOR AGRICULTURAL PURPOSES. THE AGRICULTURAL USE PROTECTION NOTICE SHALL ALSO BE INCLUDED IN THE RESTRICTIONS AND IN EVERY DEED TO LOTS WITHIN THE DEVELOPMENT.
14. THE "FLAG LOTS" SHOWN ON THE PRELIMINARY PLAN MUST BE RECONFIGURED SO THAT THEY HAVE A MORE CONVENTIONAL SHAPE CONSISTENT WITH THE OTHER LOTS IN THE SUBDIVISION.

GENERAL NOTES

1. FOR THIS AND ALL FUTURE PROJECTS, ANY LOTS, SUBSTATIONS, AND/OR WASTEWATER FACILITIES ARE REQUIRED TO HAVE ACCESS FROM THE INTERNAL SUBDIVISION STREET WITH NO DIRECT ACCESS TO THE STATE MAINTAINED HIGHWAY.
2. FOR THIS AND ALL FUTURE PROJECTS, A 20' WIDE BUFFER IS REQUIRED FROM EDGE OF THE STORMWATER MANAGEMENT POND TO THE ULTIMATE RIGHT-OF-WAY OF THE COUNTY ROAD. THE ULTIMATE RIGHT-OF-WAY LINE IS BASED ON THE FUNCTIONAL CLASSIFICATION OF THE ROAD.
3. ALL SUBDIVISION ROADS ARE PRIVATE. ALL LANDSCAPE ISLANDS SHALL BE OWNED AND MAINTAINED BY THE HOMEOWNERS' ASSOCIATION. THE SAID HOMEOWNERS' ASSOCIATION SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL STREETS, ROAD, BUFFERS, STORMWATER MANAGEMENT FACILITIES, AND OTHER COMMON AREAS.
4. ALL LOTS SHALL HAVE A 10 FOOT UTILITY EASEMENT ADJOINING RIGHT-OF-WAY.
5. FOR ANY LOTS WITHIN THREE HUNDRED (300) FEET OF THE BOUNDARY OF LAND USED PRIMARILY FOR AGRICULTURAL PURPOSES, THE OWNER OF THE DEVELOPMENT SHALL PROVIDE IN THE DEED RESTRICTIONS AND ANY LEASES OR AGREEMENTS OF SALE FOR ANY RESIDENTIAL LOT OF DWELLING UNIT THE FOLLOWING NOTICE: "THIS PROPERTY IS LOCATED IN THE VICINITY OF LAND USED PRIMARILY FOR AGRICULTURAL PURPOSES ON WHICH NORMAL AGRICULTURAL USED 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 ODDORS, THE USE OF AGRICULTURAL CHEMICALS AND NIGHTTIME FARM OPERATIONS. THE USE AND ENJOYMENT OF THIS PROPERTY IS EXPRESSLY CONDITIONED ON ACCEPTANCE OF ANY ANNOYANCE OR INCONVENIENCE WHICH MAY RESULT FROM SUCH NORMAL AGRICULTURAL USES AND ACTIVITIES."
6. STREETLIGHTS ARE REQUIRED FOR THIS PROJECT. THE EXACT LOCATION OF THE STREETLIGHTS SHALL BE DETERMINED BY THE APPROPRIATE PROVIDER.

TIS REQUIREMENTS

1. THE PLAN FOR THE SOUTH PORTION SHOULD PROVIDE AT LEAST ONE MAJOR COLLECTOR STUB STREET TO THE WEST FOR FUTURE USE IN CONNECTING THAT PORTION OF THE PROJECT TO SWEETBRIAR ROAD.
2. AS PART OF THE DESIGN AND CONSTRUCTION OF THE SUBDIVISION STREETS, SIDEWALKS SHOULD BE PROVIDED ON BOTH SIDES OF ALL INTERIOR STREETS.
3. AS PART OF THE DESIGN AND CONSTRUCTION OF THE SUBDIVISION STREETS, THE SITE ENTRANCES AND DEVELOPMENT FRONTAGE ON US RT. 9 AND SWEETBRIAR ROAD SHOULD PROVIDE SIDEWALKS TO ACCOMMODATE PEDESTRIANS AND SHOULDERS TO ACCOMMODATE BICYCLISTS.
4. AS PART OF THE DESIGN AND CONSTRUCTION OF THE SUBDIVISION STREETS, BUS STOP FACILITIES ACCEPTABLE TO THE DTC, INCLUDING A BUS PAD AND SHELTER, SHOULD BE PROVIDED ON US ROUTE 9. THESE FACILITIES SHOULD BE SHOWN ON THE RECORD PLAN AS PART OF THE SOUTH PORTION OF THE SITE AND, AT THE DTC'S DISCRETION, BUILT AS PART OF THE SITE ENTRANCE CONSTRUCTION.

DATA COLUMN

TAX MAP ID:	3-34-5.00-170.00 3-34-4.00-54.00
DATUM:	NAVD 88
VERTICAL:	NAD 83 (DE STATE PLANE)
HORIZONTAL:	
EXISTING ZONING:	AR-1 AGRICULTURAL RESIDENTIAL DISTRICT
PROPOSED ZONING:	AR-1 AGRICULTURAL RESIDENTIAL DISTRICT
EXISTING USE:	AGRICULTURE
PROPOSED USE:	177 SINGLE FAMILY LOTS WITH COMMUNITY POOL
NOTE:	SITE IS ENTIRELY WITHIN THE ENVIRONMENTALLY SENSITIVE DEVELOPMENT DISTRICT OVERLAY ZONE (ESDD02)
SITE LOCATION:	LAT. 38.7374, LONG. 75.2186 (SOUTHWEST CORNER OF PARCEL 3-34-5.00-170.00)
FLOOD HAZARD MAP:	THE SITE IS LOCATED ON THE FEMA FLOOD INSURANCE RATE MAP #10005C0330A, DATED JANUARY 6, 2005.
WETLANDS:	THIS SITE AS SHOWN HEREON CONTAINS STATE OR FEDERALLY REGULATED WETLANDS BASED ON NRI AND DNRWC WETLAND MAPS.
SITE AREA:	82.10 AC. (PARCEL 170.00) 1.28 AC. (PARCEL 54.00)
TOTAL:	83.38 AC.
LAND USE AREAS	
SINGLE FAMILY LOTS:	36.896 ACRES
RIGHT-OF-WAY:	11.804 ACRES
OPEN SPACE:	34.416 ACRES
PUMPSTATION:	0.073 ACRES
RIGHT-OF-WAY DEDICATION:	0.095 ACRES
TOTAL SITE AREA:	83.384 ACRES
REQUIRED OPEN SPACE:	30%
PROPOSED OPEN SPACE:	41%
EXISTING WOODED AREA:	23.84 AC.
PROPOSED WOODED AREA:	22.21 AC. (93%)
EXISTING WETLANDS AREA:	10.54 AC.

AR-1 MINIMUM ZONING REQUIREMENTS	25 FT. (CORNER LOTS ALLOW FOR ONE 25' SETBACK AND ONE 15' SETBACK)
FRONT YARD SETBACK:	10 FT.
SIDE YARD SETBACK:	10 FT.
REAR YARD SETBACK:	10 FT.
MIN. LOT AREA:	7,500 SF.
AVG. LOT AREA:	9,105 SF. (0.21 AC.)
WIDTH OF LOT:	60 FT.
MIN. LOT DEPTH:	100 FT.
VOLUNTARY HIGH-TIDAL WETLANDS BUFFER:	30 FT.
SANITARY SEWER:	WEST REHOBOTH EXPANSION OF THE DEWEY BEACH SANITARY SEWER DISTRICT (SUSSEX COUNTY AGREEMENT #146-9) TIDEWATER UTILITIES
WATER SUPPLY:	42 FT. (3-1/2 STORIES) WOOD CONSTRUCTION
PROPOSED MAXIMUM BUILDING HEIGHT:	
PROPOSED BUILDING CONSTRUCTION:	

LEGEND
- WKDY ADT
- AM PEAK
- PM PEAK
- TRI
- DISTRIBUTION



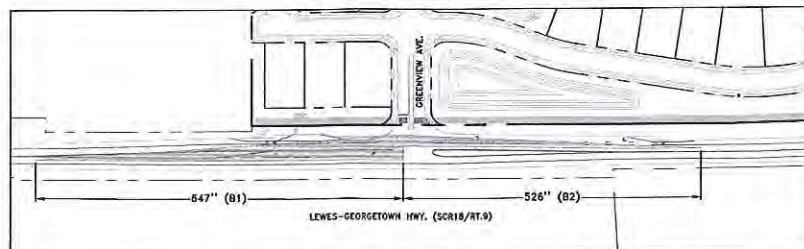
TRAFFIC DIAGRAM NO SCALE

ROAD	
US ROUTE 9 (LEWES-GEORGETOWN HWY, SCR 018)	
FUNCTIONAL CLASSIFICATION - PRINCIPAL ARTERIAL	
AADT (2017 DBF ATR)	= 16,250
10 YR PROJECTED AADT = 1.18 X 16,250	= 19,850
10 YR PROJECTED AADT + SITE ADT (1,776)	= 20,626
PEAK HOUR = 7.70% X 19,850	= 1,451
PM DIRECTIONAL SPLIT = 57.80% / 42.20%	= 839/612
10.17% TRUCK X 1,451	= 148
SPEED - POSTED	50 MPH
TRAFFIC PATTERN GROUP	B

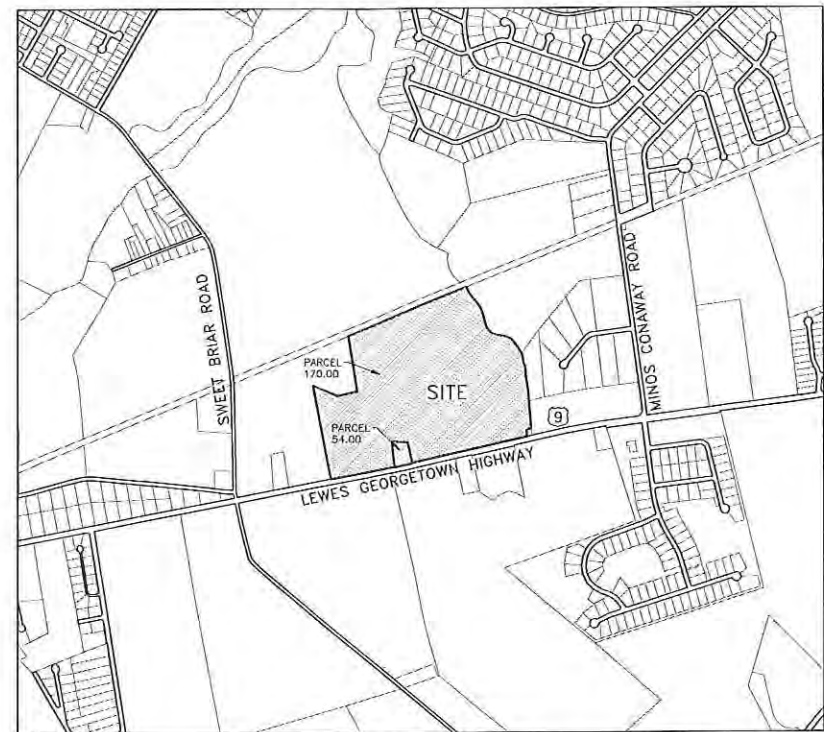
NOTE: DBF ATR VOLUMES APPROVED BY DELDOT AS PART OF THE SUSSEX SQUARE TRAFFIC COUNT SUBMISSION. K & D FACTORS ARE FROM THE DBF ATR DATA AS WELL.

SITE TRIPS GENERATED					
TYPE OF DEV.	ITE	CODE	# UNITS	AM PM	WKDY
SINGLE-FAMILY DETACHED HOMES	210	177	130	176	1,758

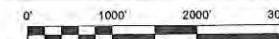
NOTES:
TRIP GENERATION IS BASED ON ITE TRIP GENERATION MANUAL 10TH EDITION.
DESIGN VEHICLE: SU-30.
TRIP DISTRIBUTION BASED ON DISTRIBUTION ON THE RED MILL POND-SOUTH AMENDED AND RESTATED PLAT.



SIGHT DISTANCE ANALYSIS SCALE: 1"=150'



LOCATION MAP SCALE: 1"=1000'



INDEX OF SHEETS

R-01	RECORD TITLE
R-02	RECORD PLAN OVERVIEW
R-03 - R-05	RECORD PLANS
R-07	RECORD DETAILS

SUSSEX COUNTY PLANNING & ZONING APPROVAL

SUSSEX COUNTY PLANNING
COMMISSION CHAIR/SECRETARY

DATE

SUSSEX COUNTY COUNCIL PRESIDENT

DATE

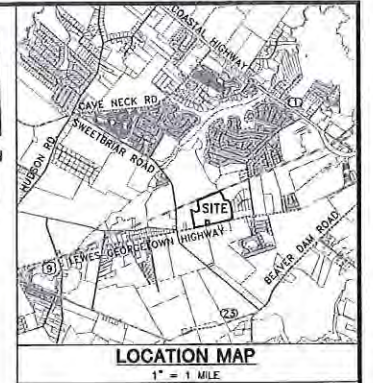
WETLANDS STATEMENT

I, EDWARD M. LAUNAY, PWS, STATE THAT THE BOUNDARIES OF WATERS OF THE UNITED STATES INCLUDING WETLANDS SUBJECT TO THE CORPS OF ENGINEERS REGULATORY PROGRAM Delineated UPON THIS PLAN HAVE BEEN DETERMINED USING MY PROFESSIONAL JUDGMENT IN ACCORDANCE WITH THE 1987 CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL, REGULATIONS AND SUPPLEMENTAL GUIDANCE (33 CFR 328.3(A)(5), WATERS OF THE U.S. DEFINITION/CECW-OR, 10-7-1991, QUESTIONS AND ANSWERS ON THE 1987 CODE MANUAL/CECW-OR, 9-26-1990, RGL 90-77/CECW-OR, 5-8-1992, CLARIFICATION AND INTERPRETATION OF THE 1987 MANUAL). THIS DELINEATION HAS NOT BEEN CONDUCTED FOR USDA PROGRAM OR AGRICULTURAL PURPOSES.

IN ACCORDANCE WITH DNRWC TIDAL WETLAND MAPS, THERE ARE NO STATE REGULATED WATERS ON THE SITE.

EDWARD M. LAUNAY, PWS NO. 875
SOCIETY OF WETLANDS SCIENTISTS
CORPS OF ENGINEERS, CERTIFIED WETLAND
DELINEATOR WDPCP33005100368

DATE



LOCATION MAP
1" = 1 MILE

DELDOT RECORD NOTES

1. NO LANDSCAPING SHALL BE ALLOWED WITHIN R/W UNLESS THE PLANS ARE COMPLIANT WITH SECTION 3.7 OF THE DEVELOPMENT COORDINATION MANUAL (DCM).
2. ALL ENTRANCES SHALL CONFORM TO THE DELAWARE DEPARTMENT OF TRANSPORTATION'S (DELDOT'S) CURRENT DEVELOPMENT COORDINATION MANUAL (DCM) AND SHALL BE SUBJECT TO ITS APPROVAL.
3. SHRUBBERY, PLANTINGS, SIGNS AND/OR OTHER VISUAL BARRIERS THAT COULD OBSTRUCT THE SIGHT DISTANCE OF A DRIVER PREPARING TO ENTER THE ROADWAY ARE PROHIBITED WITHIN THE DEFINED DEPARTURE SIGHT TRIANGLE AREA ESTABLISHED ON THIS PLAN. IF THE ESTABLISHED DEPARTURE SIGHT TRIANGLE AREA IS OUTSIDE THE RIGHT-OF-WAY OR PROJECTS ONTO AN ADJACENT PROPERTY OWNER'S LAND, A SIGHT EASEMENT SHOULD BE ESTABLISHED AND RECORDED WITH ALL AFFECTED PROPERTY OWNERS TO MAINTAIN THE REQUIRED SIGHT DISTANCE.
4. UPON COMPLETION OF THE CONSTRUCTION OF THE SIDEWALK OR SHARED-USE PATH ACROSS THIS PROJECT'S FRONTAGE AND PHYSICAL CONNECTION TO ADJACENT EXISTING FACILITIES, THE DEVELOPER, THE PROPERTY OWNERS OR BOTH ASSOCIATED WITH THIS PROJECT, SHALL BE RESPONSIBLE TO REMOVE ANY EXISTING ROAD TIE-IN CONNECTIONS LOCATED ALONG ADJACENT PROPERTIES, AND RESTORE THE AREA TO GRASS, SUCH ACTIONS SHALL BE COMPLETED AT DELDOT'S DISCRETION, AND IN CONFORMANCE WITH DELDOT'S SHARED-USE PATH AND/OR SIDEWALK TERMINATION POLICY.
5. SUBDIVISION STREETS CONSTRUCTED WITHIN THE LIMITS OF THE RIGHT-OF-WAY ARE PRIVATE AS SHOWN ON THIS PLAN AND ARE TO BE MAINTAINED BY THE DEVELOPER, PROPERTY OWNERS OR BOTH. THE STATE OF DELAWARE ASSUMES NO MAINTENANCE RESPONSIBILITIES FOR THE FUTURE MAINTENANCE OF THESE STREETS.
6. THE SHARED-USE PATH SHALL BE THE RESPONSIBILITY OF THE DEVELOPER, THE PROPERTY OWNERS OR BOTH WITHIN THIS SUBDIVISION. THE STATE OF DELAWARE ASSUMES NO RESPONSIBILITY FOR THE FUTURE MAINTENANCE OF THE SHARED-USE PATH.
7. ALL LOTS SHALL HAVE ACCESS FROM THE INTERNAL SUBDIVISION STREET.
8. DRIVEWAYS WILL NOT BE PERMITTED TO BE PLACED AT CATCH BASIN LOCATIONS.
9. TO MINIMIZE RUTTING AND EROSION OF THE ROADSIDE DUE TO ON-STREET PARKING, DRIVEWAY AND BUILDING LAYOUTS MUST BE CONFIGURED TO ALLOW FOR VEHICLES TO BE STORED IN THE DRIVEWAY BEYOND THE RIGHT-OF-WAY, WITHOUT INTERFERING WITH SIDEWALK ACCESS AND CLEARANCE.
10. THE DEVELOPER SHALL BE REQUIRED TO FURNISH AND PLACE RIGHT-OF-WAY MARKERS TO PROVIDE A PERMANENT REFERENCE FOR RE-ESTABLISHING THE RIGHT-OF-WAY AND PROPERTY CORNERS ON LOCAL AND HIGHER ORDER FRONTAGE ROADS. RIGHT-OF-WAY MARKERS SHALL BE SET AND/OR PLACED ALONG THE FRONTAGE ROAD RIGHT-OF-WAY AT PROPERTY CORNERS AND AT EACH CHANGE IN RIGHT-OF-WAY ALIGNMENT IN ACCORDANCE WITH SECTION 3.2.4.2 OF THE DEVELOPMENT COORDINATION MANUAL.
11. A PERPETUAL CROSS ACCESS INGRESS/EGRESS EASEMENT HEREBY ESTABLISHED AS SHOWN ON THIS PLAN.
12. AN ENTRANCE PERMIT SHALL NOT BE ISSUED UNTIL SUCH THE ALL THE REQUIRED RIGHTS-OF-WAY/EASEMENTS HAVE BEEN ACQUIRED AND THE ACQUISITION DEEDS RECORDED IN THE SUSSEX COUNTY RECORDER OF DEEDS OFFICE.

GEORGETOWN TO LEWES TRAIL NOTES

1. THERE IS A PLANNED GEORGETOWN TO LEWES TRAIL ALONG THIS DEVELOPMENT IN WHICH A CONNECTION TO THE TRAIL SHALL BE INSTALLED BY THE DEVELOPER.
2. IF THE DELDOT TRAIL PROJECT IS CONSTRUCTED PRIOR TO RED MILL POND SOUTH, THEN THE DEVELOPER SHALL INSTALL THE CONNECTION TO THE TRAIL.
3. IF RED MILL POND SOUTH IS CONSTRUCTED PRIOR TO THE DELDOT TRAIL PROJECT, THEN THE CONNECTION TO THE TRAIL SHALL BE INSTALLED BY THE DEVELOPER WITHIN 6-MONTHS AFTER CONSTRUCTION, FINAL INSPECTION AND ACCEPTANCE OF THE TRAIL BY DELDOT. SUSSEX COUNTY PLANNING & ZONING, THE DEVELOPER AND/OR HOA SHALL BE NOTIFIED WHEN THE TRAIL IS ACCEPTED BY DELDOT.
4. THE MAINTENANCE OF THE TRAIL CONNECTION FROM DEERWOOD LANE TO THE GEORGETOWN TO LEWES TRAIL SHALL BE THE SOLE RESPONSIBILITY OF THE DEVELOPER/OWNER, HOA OR BOTH. THE STATE ASSUMES NO MAINTENANCE RESPONSIBILITY OF THE TRAIL CONNECTION.

SUSSEX CONSERVATION DISTRICT

OWNER'S STATEMENT

I, THE UNDERSIGNED, HEREBY STATE THAT I AM THE OWNER OF THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN. THE PLAN WAS MADE AT MY DIRECTION. I ACKNOWLEDGE THE SAME TO BE MY ACT AND DESIRE THE PLAN BE RECORDED ACCORDING TO LAW.

COLEBY COX, MANAGER
SWEETBRIAR, LLC
172 CENTER STREET SUITE 204
JACKSON HOLE, WY 83001
PH: 307-734-1154

ENGINEER'S STATEMENT

I, JAMIE L. SECHLER, P.E., HEREBY STATE THAT I AM A REGISTERED ENGINEER IN THE STATE OF DELAWARE, THAT THE INFORMATION SHOWN HEREON HAS BEEN PREPARED UNDER MY SUPERVISION AND TO MY BEST KNOWLEDGE AND BELIEF REPRESENTS GOOD ENGINEERING PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.

JAMIE L. SECHLER, P.E.
DAVIS, BOWEN & FRIEDEL, INC.
1 PARK AVENUE
MILFORD, DELAWARE, 19963



DAVIS, BOWEN & FRIEDEL, INC.
ARCHITECTS, ENGINEERS & SURVEYORS

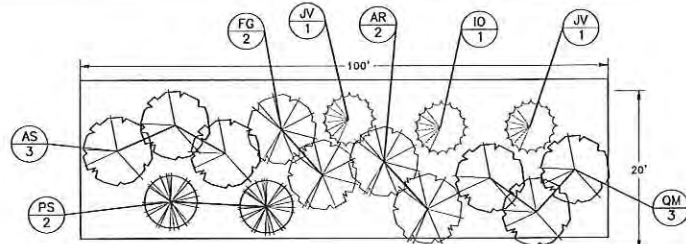
MILFORD, DELAWARE (302) 424-1441

ENGINEER
DAVIS, BOWEN & FRIEDEL, INC.
1 PARK AVENUE
MILFORD, DELAWARE 19963
PH: 302-424-1441
FAX: 302-424-0430

OWNER/DEVELOPER
SWEETBRIAR, LLC
172 CENTER STREET SUITE 204
JACKSON HOLE, WY 83001
PH: 307-734-1154

GENERAL LANDSCAPE NOTES

1. QUALITY AND SIZE OF PLANTS, SPREAD OF ROOTS, AND SIZE OF BALLS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS OF THE AMERICAN ASSOCIATION OF NURSERYMEN "AMERICAN STANDARDS FOR NURSERY STOCK".
2. THE LAND DEVELOPER SHALL BE HELD RESPONSIBLE FOR THE HEALTH AND SURVIVAL OF THE TREES INCLUDING REGULAR NECESSARY WATERING FOR A MINIMUM OF TWO YEARS OR UNTIL SUCH LATER DATE AS THE MAINTENANCE RESPONSIBILITIES ARE TRANSFERRED TO A HOMEOWNERS ASSOCIATION, PROVIDED HOWEVER THAT THE DEVELOPER SHALL REPLACE ANY TREES THAT DIE DURING THE MINIMUM TWO YEAR DEVELOPER MAINTENANCE PRIOR TO TRANSFERRING MAINTENANCE RESPONSIBILITIES TO A HOMEOWNERS ASSOCIATION.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UTILITIES AND MAY MAKE MINOR ADJUSTMENTS IN SPACING AND/OR LOCATION OF PLANT MATERIALS. CONTRACTOR TO VERIFY "AS BUILT" LOCATION OF ALL UTILITIES.
4. NO SUBSTITUTIONS SHALL BE MADE WITHOUT APPROVAL OF THE OWNER.
5. ALL AREAS NOT STABILIZED IN PAVING OR PLANT MATERIALS SHOULD BE SEEDED AND MULCHED. (SEE EROSION & SEDIMENT CONTROL PLAN.)
6. EVERGREEN TREES SHALL HAVE A FULL, WELL-BRANCHED, CONICAL FORM TYPICAL OF THE SPECIES.
7. ALL DECIDUOUS SHADE TREES SHALL BRANCH A MINIMUM OF 6"-0" ABOVE GROUND LEVEL. TREES SHALL BE PLANTED AND STAKED IN ACCORDANCE WITH THE STAKING DETAIL SHOWN.
8. THE FULL EXTENT OF ALL PLANTING BEDS SHALL RECEIVE 4" OF TOPSOIL AND 3" OF BARK MULCH PER SPECIFICATIONS.
9. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTINGS SHOWN ON THIS DRAWING AND AS SPECIFIED.
10. ALL PLANTS SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS THE PLANT'S ORIGINAL GRADE BEFORE DIGGING.



TYPICAL FORESTED BUFFER 100' x 20'
NOT TO SCALE

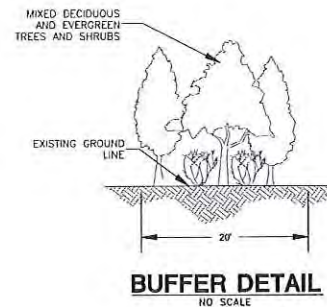
20' PROPOSED FORESTED BUFFER W/ EXISTING VEGETATION TO REMAIN SUPPLEMENTED W/ADDITIONAL PLANTINGS TO CREATE A COMPLETE SCREEN

FORESTED BUFFER PLANT SCHEDULE				
SYMBOL	KEY	BOTANICAL NAME	COMMON NAME	SIZE
DECIDUOUS TREE				
	AR	ACER rubrum	RED MAPLE	1 3/4 - 2" Cal., B&B
	AS	ACER saccharum	SUGAR MAPLE	1 3/4 - 2" Cal., B&B
	QM	QUERCUS phellos	WILLOW OAK	1 3/4 - 2" Cal., B&B
	FG	FAGUS grandifolia	AMERICAN BEECH	1 3/4 - 2" Cal., B&B
EVERGREEN TREE				
	PS	PINUS strobus	EASTERN WHITE PINE	5'-6" Ht., B&B
	JV	JUNIPERUS virginiana	EASTERN RED CEDAR	5'-6" Ht., B&B
	IO	ILEX opaca	AMERICAN HOLLY	5'-6" Ht., B&B

LANDSCAPE ARCHITECT'S STATEMENT

I, TIMOTHY M. METZNER, HEREBY STATE THAT I AM A REGISTERED LANDSCAPE ARCHITECT IN THE STATE OF DELAWARE. THAT THE INFORMATION SHOWN HEREON HAS BEEN PREPARED UNDER MY SUPERVISION AND TO MY BEST KNOWLEDGE AND BELIEF REPRESENTS GOOD ENGINEERING PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.

By TIMOTHY M. METZNER, DATE _____
DAVIS, BOWEN & FRIEDEL, INC.
1 PARK AVENUE
MILFORD, DELAWARE, 19963



DAVIS, BOWEN & FRIEDEL, INC.
ARCHITECTS, ENGINEERS & SURVEYORS
SALISBURY, MARYLAND (410) 543-9091
MILFORD, DELAWARE (302) 424-1441

**THE VILLAGES AT RED MILL POND-SOUTH
RESIDENTIAL SUBDIVISION**
LEWES-REHOBOTH HUNDRED, SUSSEX COUNTY, DELAWARE

REVISED:

Date: DECEMBER, 2018
Scale: 1" = 100'
Dwn.By: DJR
Proj No.: 14430001
Dwg No.:

L-01

EXISTING BOUNDARY CURVE TABLE					
CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
BC1	595.15'	274.48'	272.06'	S 59°01'51" E	28°25'29"
BC2	210.00'	254.39'	239.12'	N 73°03'11" E	69°24'26"
BC3	11990.00'	142.43'	142.42'	S 77°41'49" W	0°40'50"

N/F
SWEETHEAR, LLC
3-34-4.00-41.00
ZONE: AR-1

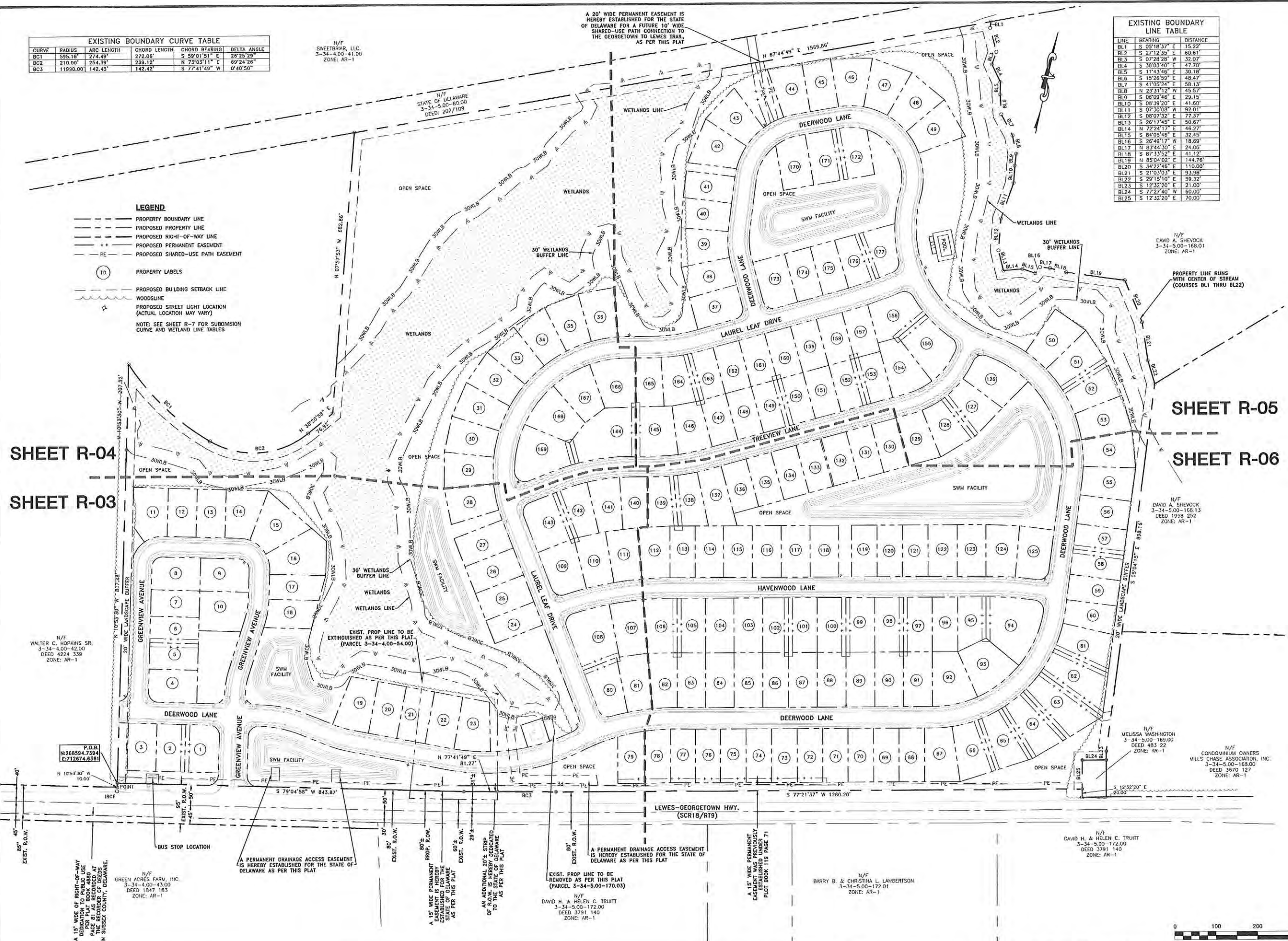
A 20' WIDE PERMANENT EASEMENT IS HEREBY ESTABLISHED FOR THE STATE OF DELAWARE FOR A FUTURE 10' WIDE SHARED-USE PATH CONNECTION TO THE GEORGETOWN TO LEWES TRAIL, AS PER THIS PLAT

EXISTING BOUNDARY LINE TABLE		
LINE	BEARING	DISTANCE
BL1	S 05°18'37" E	15.22'
BL2	S 27°12'35" E	60.61'
BL3	S 07°28'28" W	32.07'
BL4	S 36°03'40" E	47.20'
BL5	S 11°43'46" E	30.18'
BL6	S 15°26'59" E	48.47'
BL7	S 41°05'24" E	58.13'
BL8	N 23°31'12" W	45.57'
BL9	S 06°09'45" E	29.15'
BL10	S 05°39'20" E	41.60'
BL11	S 07°30'08" W	92.01'
BL12	S 08°07'32" E	77.37'
BL13	S 26°17'45" E	50.67'
BL14	N 72°24'17" E	46.27'
BL15	S 84°05'45" E	32.45'
BL16	S 26°49'17" W	18.69'
BL17	N 83°44'30" E	24.08'
BL18	S 87°13'52" E	41.12'
BL19	N 85°04'02" E	144.76'
BL20	S 34°22'45" E	110.00'
BL21	S 21°03'03" E	93.98'
BL22	S 28°15'10" E	59.32'
BL23	S 12°32'20" E	21.00'
BL24	S 77°27'40" W	60.00'
BL25	S 12°32'20" E	70.00'

LEGEND

- PROPERTY BOUNDARY LINE
- PROPOSED PROPERTY LINE
- PROPOSED RIGHT-OF-WAY LINE
- PROPOSED PERMANENT EASEMENT
- PE
- PROPOSED SHARED-USE PATH EASEMENT
- PROPERTY LABELS
- PROPOSED BUILDING SETBACK LINE
- WOODS LINE
- PROPOSED STREET LIGHT LOCATION (ACTUAL LOCATION MAY VARY)

NOTE: SEE SHEET R-7 FOR SUBMISSION CURVE AND WETLAND LINE TABLES



SHEET R-05
SHEET R-06

DAVIS, BOWEN & FRIEDEL, INC.
ARCHITECTS, ENGINEERS & SURVEYORS
SALISBURY, MARYLAND (410) 543-1097
MILFORD, DELAWARE (302) 454-1441



RECORD OVERVIEW

**THE VILLAGES AT RED MILL POND-SOUTH
RESIDENTIAL SUBDIVISION
LEWES-REHOBOTH HUNDRED, SUSSEX COUNTY, DELAWARE**

REVISED:
8-6-18 DELDOT COMMENTS
10-8-18 DELDOT COMMENTS
10-24-18 SSC COMMENTS
01-11-19 P&Z COMMENTS

Date: AUGUST, 2018
Scale: 1" = 100'
Drawn By: DJR
Proj. No.: 14436001
Dwg. No.:

R-02



DAVIS, BOWEN & FRIEDEL, INC.
ARCHITECTS, ENGINEERS & SURVEYORS



RECORD PLAN

THE VILLAGES AT RED MILL POND-SOUTH
RESIDENTIAL SUBDIVISION
LEWES-REHOBOTH HUNDRED, SUSSEX COUNTY, DELAWARE

REVISED:
8-6-18 DELDOT COMMENTS
10-8-18 DELDOT COMMENTS
10-24-18 SCE COMMENTS
01-11-19 PAZ COMMENTS

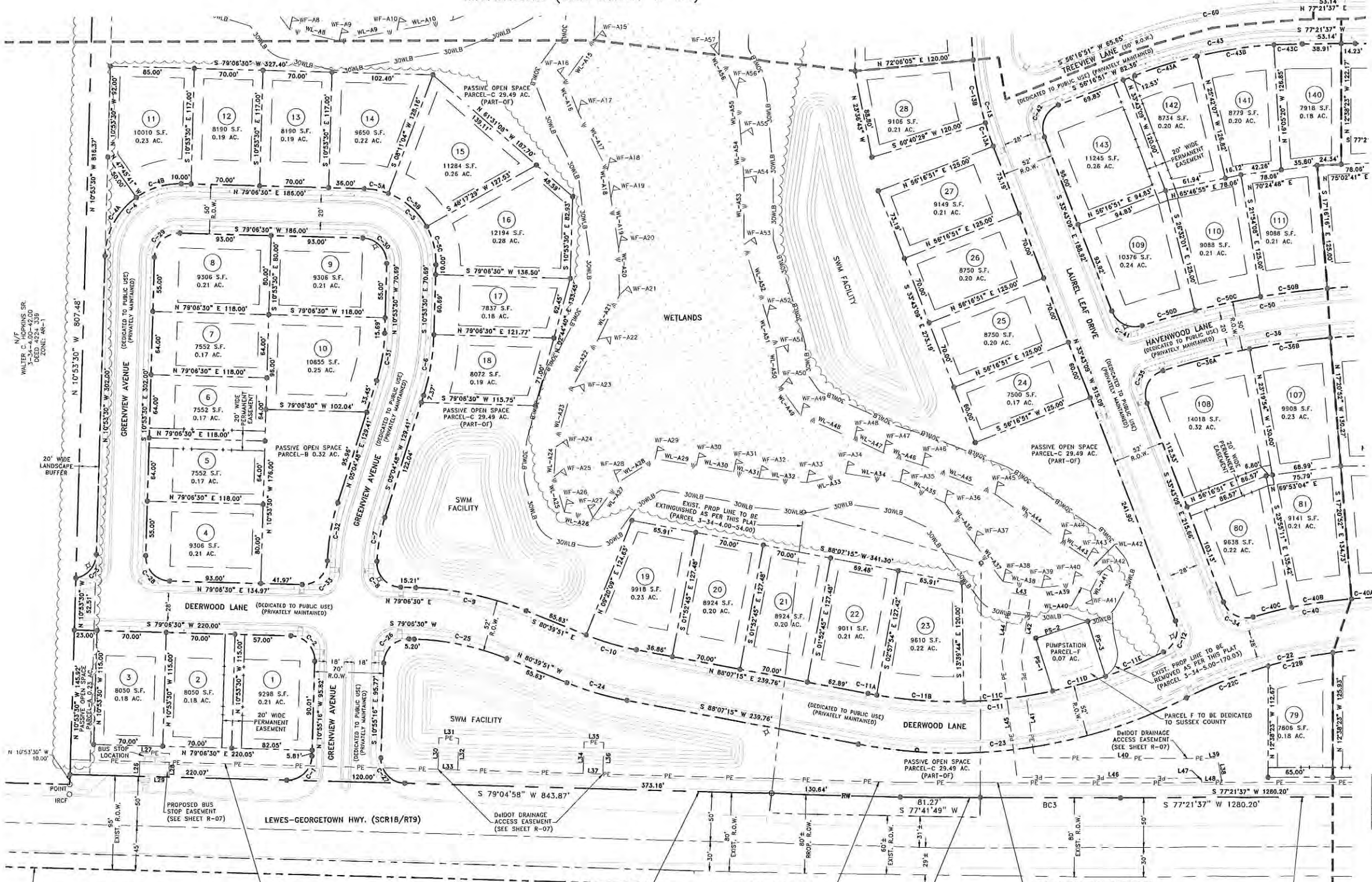
Date: AUGUST, 2018
Scale: 1"=50'
Drawn By: DJS
Proj. No.: 14430001
Dwg. No.:

R-03

- LEGEND**
- PROPERTY BOUNDARY LINE
 - - - PROPOSED PROPERTY LINE
 - - - PROPOSED RIGHT-OF-WAY LINE
 - + - PROPOSED PERMANENT EASEMENT
 - - - PE PROPOSED SHARED-USE PATH EASEMENT
 - 10 PROPERTY LABELS
 - - - PROPOSED BUILDING SETBACK LINE
 - WOODSLINE
 - PROPOSED STREET LIGHT LOCATION (ACTUAL LOCATION MAY VARY)
- BOUNDARY MONUMENT LEGEND**
- POINT (29 SHOWN)
 - IRCT IRON ROD AND CAP FOUND (1 EXISTING)
 - IRON ROD AND CAP SET (9 PROPOSED)
 - IRON ROD WITH CAP SET (462 PROPOSED)
- SUBDIVISION MONUMENT LEGEND**
- IRON ROD WITH CAP SET (462 PROPOSED)
- NOTE: SEE SHEET R-7 FOR SUBDIVISION CURVE AND WETLAND LINE TABLES

MATCHLINE (SEE SHEET R-04)

MATCHLINE (SEE SHEET R-06)



PROPOSED PARCEL-F LINE TABLE

LINE	BEARING	DISTANCE
PS-1	N 30°33'58" W	56.00'
PS-2	N 59°26'22" E	55.00'
PS-3	S 30°33'58" E	58.46'

A 15' WIDE OF RIGHT-OF-WAY DEDICATION TO PUBLIC USE PER PLAT BOOK 4880 PAGE 81 AS RECORDED AT THE RECORDER OF DEEDS IN SUSSEX COUNTY, DELAWARE.

A 15' WIDE PERMANENT EASEMENT FOR SHARED USE PATH DEDICATION PER PLAT BOOK 119 PAGE 71 AS RECORDED AT THE RECORDER OF DEEDS IN SUSSEX COUNTY, DELAWARE.

A 15' WIDE PERMANENT EASEMENT IS HEREBY ESTABLISHED FOR THE STATE OF DELAWARE AS PER THIS PLAT.

A 20' WIDE OF RIGHT-OF-WAY DEDICATION PER PLAT BOOK 119 PAGE 71 AS RECORDED AT THE RECORDER OF DEEDS IN SUSSEX COUNTY, DELAWARE.

AN ADDITIONAL 20' STRIP OF R.O.W. IS HEREBY DEDICATED TO THE STATE OF DELAWARE AS PER THIS PLAT.

A 15' WIDE PERMANENT EASEMENT FOR SHARED USE PATH DEDICATION PER PLAT BOOK 119 PAGE 71 AS RECORDED AT THE RECORDER OF DEEDS IN SUSSEX COUNTY, DELAWARE.

A 20' WIDE OF RIGHT-OF-WAY DEDICATION PER PLAT BOOK 119 PAGE 71 AS RECORDED AT THE RECORDER OF DEEDS IN SUSSEX COUNTY, DELAWARE.

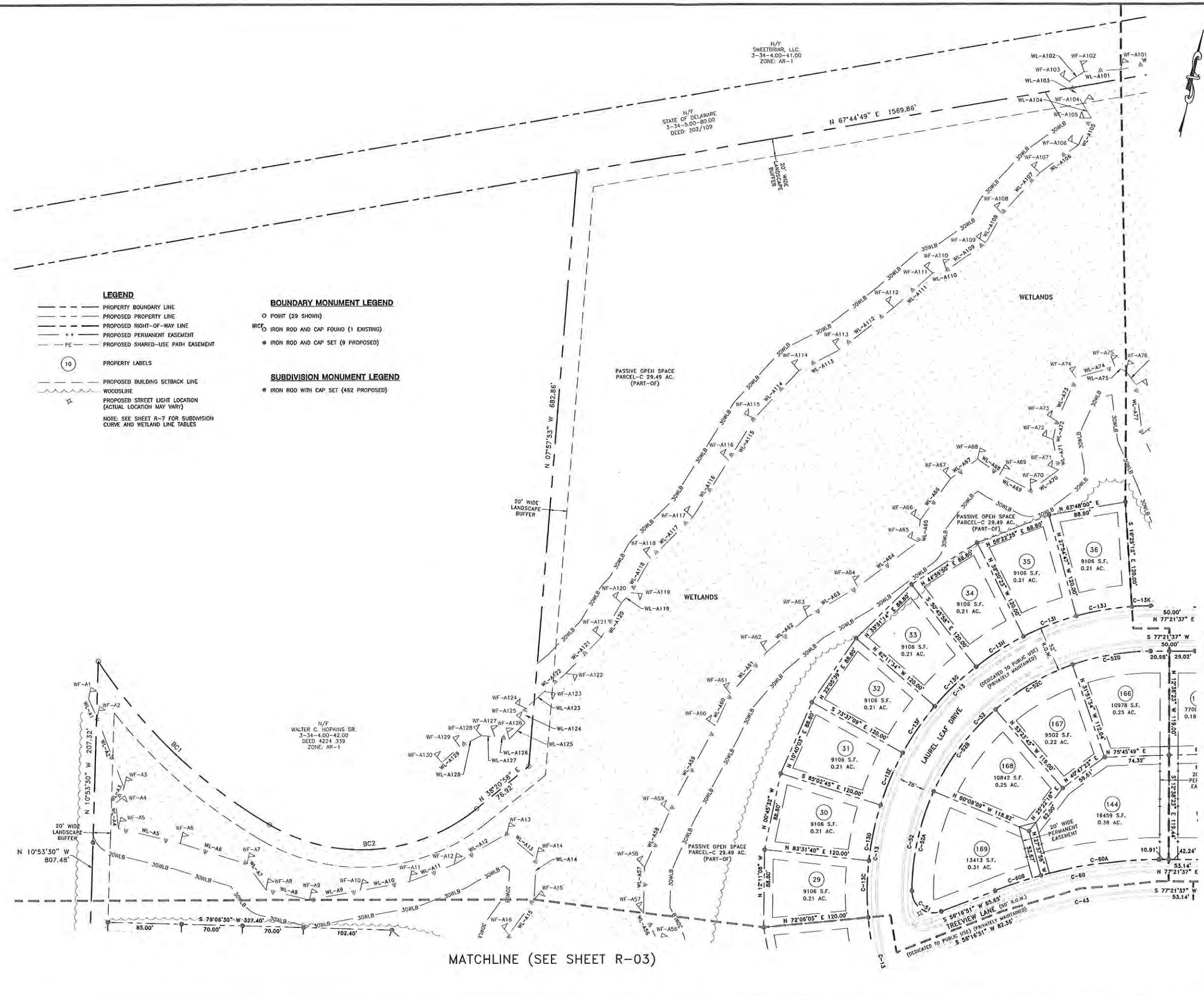


**THE VILLAGES AT RED MILL POND-SOUTH
 RESIDENTIAL SUBDIVISION
 LEWES-REHOBOTH HUNDRED, SUSSEX COUNTY, DELAWARE**

REVISED:
 8-6-18 DELDOT COMMENTS
 10-8-18 DELDOT COMMENTS
 10-24-18 SCE COMMENTS
 01-11-19 PAZ COMMENTS

Date: AUGUST, 2018
 Scale: 1"=50'
 Drawn By: DJS
 Proj. No.: 14430001
 Drawn By:

R-04



- LEGEND**
- PROPERTY BOUNDARY LINE
 - - - PROPOSED PROPERTY LINE
 - - - PROPOSED RIGHT-OF-WAY LINE
 - - - PROPOSED PERMANENT EASEMENT
 - - - FE PROPOSED SHARED-USE PATH EASEMENT
 - 10 PROPERTY LABELS
 - - - PROPOSED BUILDING SETBACK LINE
 - WOODSLINE
 - ☆ PROPOSED STREET LIGHT LOCATION (ACTUAL LOCATION MAY VARY)
 - NOTE: SEE SHEET R-7 FOR SUBDIVISION CURVE AND WETLAND LINE TABLES
- BOUNDARY MONUMENT LEGEND**
- POINT (29 SHOWN)
 - IRCF IRON ROD AND CAP FOUND (1 EXISTING)
 - IRON ROD AND CAP SET (9 PROPOSED)
- SUBDIVISION MONUMENT LEGEND**
- IRON ROD WITH CAP SET (462 PROPOSED)

MATCHLINE (SEE SHEET R-03)

MATCHLINE (SEE SHEET R-05)

MATCHLINE (SEE SHEET R-04)

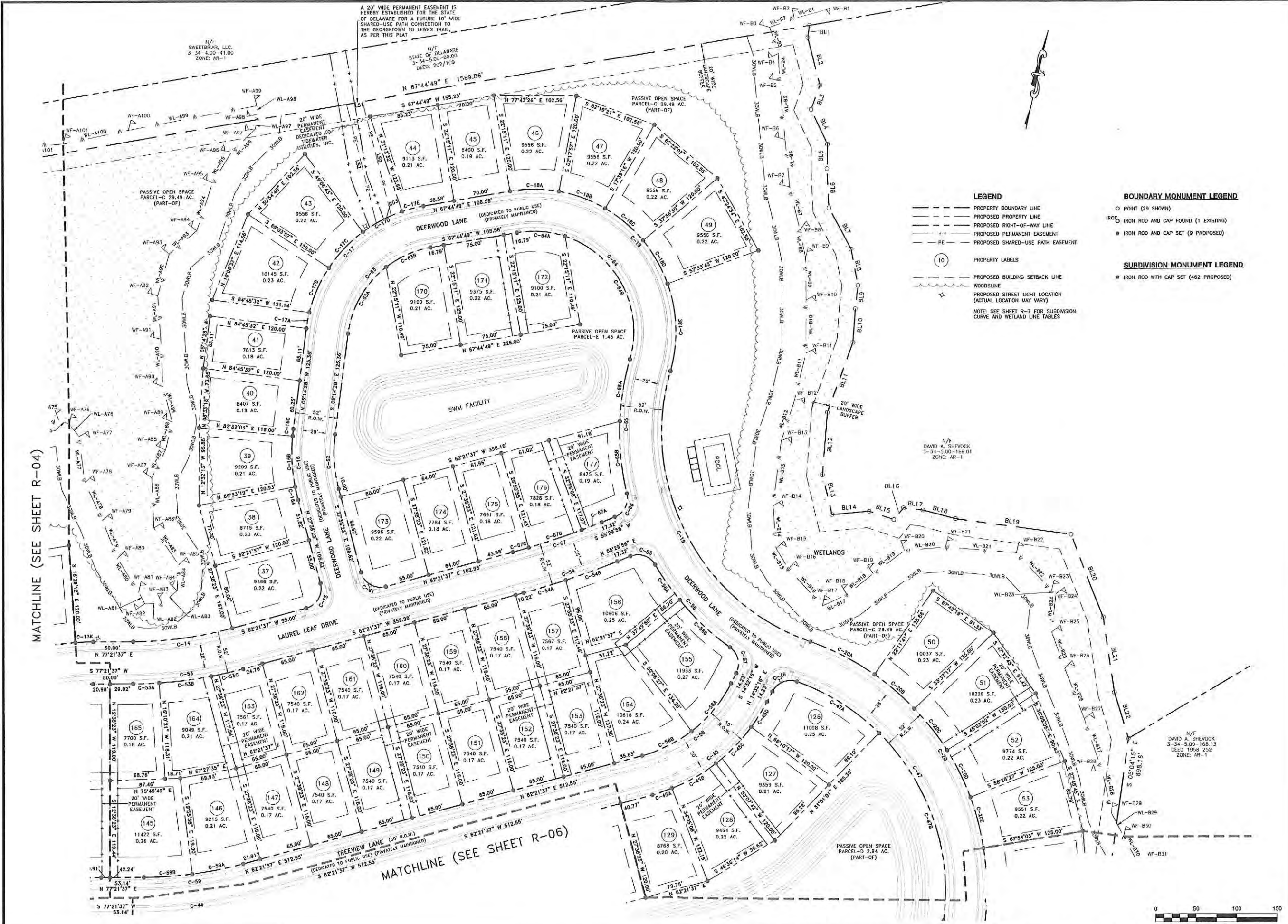
MATCHLINE (SEE SHEET R-06)

A 20' WIDE PERMANENT EASEMENT IS HEREBY ESTABLISHED FOR THE STATE OF DELAWARE FOR A FUTURE 10' WIDE SHARED-USE PATH CONNECTION TO THE GEORGETOWN TO LEWES TRAIL, AS PER THIS PLAT

N/F SWEETBRAR, LLC. 3-34-4.00-11.00 ZONE: AR-1

N/F STATE OF DELAWARE 3-34-5.00-80.00 DEED: 202/1109

- LEGEND**
- PROPERTY BOUNDARY LINE
 - - - PROPOSED PROPERTY LINE
 - - - PROPOSED RIGHT-OF-WAY LINE
 - - - PROPOSED PERMANENT EASEMENT
 - - - PE PROPOSED SHARED-USE PATH EASEMENT
 - (10) PROPERTY LABELS
 - - - PROPOSED BUILDING SETBACK LINE
 - WOODSLINE
 - PROPOSED STREET LIGHT LOCATION (ACTUAL LOCATION MAY VARY)
- BOUNDARY MONUMENT LEGEND**
- POINT (29 SHOWN)
 - IRON ROD AND CAP FOUND (1 EXISTING)
 - IRON ROD AND CAP SET (9 PROPOSED)
- SUBDIVISION MONUMENT LEGEND**
- IRON ROD WITH CAP SET (462 PROPOSED)
- NOTE: SEE SHEET R-7 FOR SUBDIVISION CURVE AND WETLAND LINE TABLES



DAVIS, BOWEN & FRIEDEL, INC.
ARCHITECTS, ENGINEERS & SURVEYORS
SALISBURY, MARYLAND (410) 543-0091
MILFORD, DELAWARE (302) 424-1441



RECORD PLAN

**THE VILLAGES AT RED MILL POND-SOUTH
RESIDENTIAL SUBDIVISION
LEWES-REHOBOTH HUNDRED, SUSSEX COUNTY, DELAWARE**

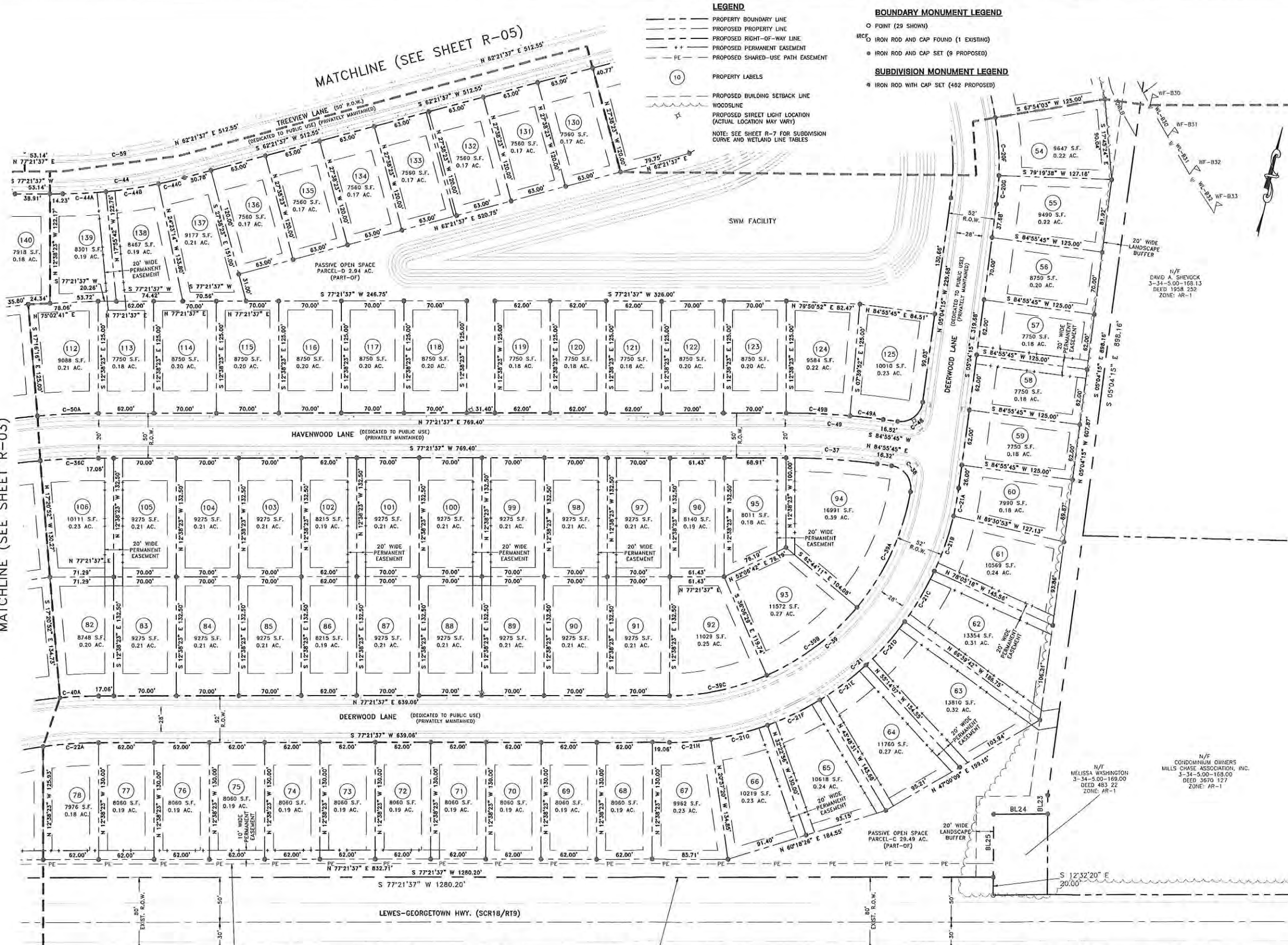
REVISED:
8-6-18 DELDOT COMMENTS
10-8-18 DELDOT COMMENTS
10-24-18 SCE COMMENTS
01-11-19 PR2 COMMENTS

Date: AUGUST, 2018
Scale: 1"=50'
Dwn.By: DJS
Proj.No.: 14436001
Dwg.No.:

R-05

MATCHLINE (SEE SHEET R-03)

MATCHLINE (SEE SHEET R-05)



- LEGEND**
- PROPERTY BOUNDARY LINE
 - - - PROPOSED PROPERTY LINE
 - - - PROPOSED RIGHT-OF-WAY LINE
 - - - PROPOSED PERMANENT EASEMENT
 - - - PROPOSED SHARED-USE PATH EASEMENT
 - 10 PROPERTY LABELS
 - PROPOSED BUILDING SETBACK LINE
 - WOODSLINE
 - PROPOSED STREET LIGHT LOCATION (ACTUAL LOCATION MAY VARY)
 - NOTE: SEE SHEET R-7 FOR SUBDIVISION CURVE AND WETLAND LINE TABLES
- BOUNDARY MONUMENT LEGEND**
- POINT (29 SHOWN)
 - IRCF IRON ROD AND CAP FOUND (1 EXISTING)
 - IRON ROD AND CAP SET (9 PROPOSED)
 - IRON ROD WITH CAP SET (482 PROPOSED)
- SUBDIVISION MONUMENT LEGEND**
- IRON ROD WITH CAP SET (482 PROPOSED)

N/E DAVID H. & HELEN C. TRUITT 3-34-5.00-172.00 DEED 3791 140 ZONE: AR-1

N/E MELISSA WASHINGTON 3-34-5.00-169.00 DEED 483 22 ZONE: AR-1

N/E CONDOMINIUM OWNERS MILLS CHASE ASSOCIATION, INC. 3-34-5.00-168.00 DEED 3670 127 ZONE: AR-1

N/E DAVID A. SHEVOCK 3-34-5.00-168.13 DEED 1958 252 ZONE: AR-1

A 15' WIDE PERMANENT EASEMENT FOR SHARED USE PATH DEDICATION PER PLAT BOOK 119 PAGE 71 AS RECORDED AT THE RECORDER OF DEEDS IN SUSSEX COUNTY, DELAWARE.

N/E BARRY B. & CHRISTINA L. LAMBERTSON 3-34-5.00-172.01 DEED 3791 140 ZONE: AR-1

A 20' WIDE OF RIGHT-OF-WAY DEDICATION PER PLAT BOOK 119 PAGE 71 AS RECORDED AT THE RECORDER OF DEEDS IN SUSSEX COUNTY, DELAWARE.

N/E DAVID H. & HELEN C. TRUITT 3-34-5.00-172.00 DEED 3791 140 ZONE: AR-1



DAVIS, BOWEN & FRIEDEL, INC.
ARCHITECTS, ENGINEERS & SURVEYORS
SALISBURY, MARYLAND (410) 543-0001
MILFORD, DELAWARE (302) 424-1441



RECORD PLAN

THE VILLAGES AT RED MILL POND-SOUTH
RESIDENTIAL SUBDIVISION
LEWES-REHOBOTH HUNDRED, SUSSEX COUNTY, DELAWARE

REVISED:
8-6-18 DELDOT COMMENTS
10-8-18 DELDOT COMMENTS
10-24-18 SCC COMMENTS
01-11-19 PAZ COMMENTS

Date: AUGUST, 2018
Scale: 1"=50'
Dwn.B: DJS
Proj.No.: 14430001
Dwg.No.:

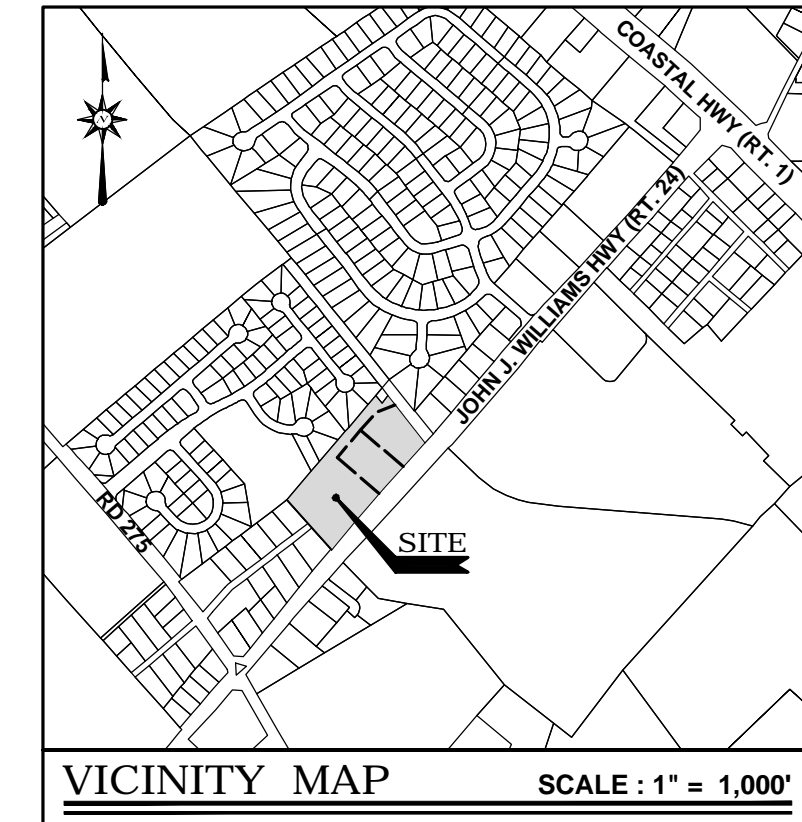
R-06

PROPOSED SUBDIVISION CURVE TABLE					
CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C-1	25.00'	39.27'	35.36'	N 34°04'51" E	90°00'14"
C-2	25.00'	39.26'	35.35'	N 55°54'23" W	89°58'14"
C-3	25.00'	34.24'	31.62'	N 28°02'24" E	78°27'00"
C-4	75.00'	117.81'	106.07'	N 34°06'30" E	90°00'00"
C-4A	75.00'	69.55'	67.08'	N 15°40'24" E	53°07'48"
C-4B	75.00'	48.28'	47.43'	N 60°40'24" E	38°52'12"
C-4C	75.00'	117.81'	106.07'	S 60°03'30" E	90°00'00"
C-5	75.00'	24.97'	24.86'	N 89°38'47" E	19°04'33"
C-5B	75.00'	52.50'	51.43'	S 61°45'44" E	40°06'25"
C-5C	75.00'	40.34'	39.85'	S 26°18'00" E	30°49'01"
C-6	725.00'	82.72'	82.51'	S 02°54'11" E	19°58'18"
C-7	175.00'	45.09'	44.97'	S 02°18'05" E	14°45'46"
C-8	25.00'	39.80'	35.73'	S 55°17'14" E	91°12'39"
C-9	326.00'	115.09'	114.49'	N 89°13'20" E	20°13'39"
C-10	274.00'	53.63'	53.55'	S 89°16'18" E	11°12'54"
C-11	475.00'	307.99'	302.62'	N 87°34'40" E	1°05'09"
C-11A	475.00'	8.00'	9.00'	N 81°41'11" E	10°41'20"
C-11B	475.00'	88.58'	88.56'	N 70°49'57" E	11°00'57"
C-11C	475.00'	91.28'	91.14'	N 82°00'18" E	6°34'41"
C-11D	475.00'	53.09'	53.08'	N 87°34'40" E	1°05'09"
C-11E	475.00'	63.34'	63.89'	N 54°49'35" E	7°42'45"
C-12	25.00'	36.95'	33.68'	N 08°37'32" E	84°41'21"
C-13	326.00'	63.02'	62.59'	N 21°49'14" E	11°04'46"
C-13A	326.00'	23.00'	23.98'	N 51°13'10" W	42°25'38"
C-13B	326.00'	65.01'	64.91'	N 23°38'43" W	11°25'35"
C-13C	326.00'	65.01'	64.91'	N 12°11'08" W	11°25'35"
C-13D	326.00'	65.01'	64.91'	N 08°05'32" W	11°25'35"
C-13E	326.00'	65.01'	64.91'	N 10°40'53" W	11°25'35"
C-13F	326.00'	65.01'	64.91'	N 22°03'30" W	11°25'35"
C-13G	326.00'	65.01'	64.91'	N 33°31'14" W	11°25'35"
C-13H	326.00'	65.01'	64.91'	N 44°36'50" W	11°25'35"
C-13I	326.00'	65.01'	64.91'	N 59°27'25" E	11°25'35"
C-13J	326.00'	65.01'	64.91'	N 67°48'00" E	11°25'35"
C-13K	326.00'	21.89'	21.88'	N 75°26'13" E	35°04'49"
C-14	474.00'	124.09'	123.74'	N 69°51'37" E	15°00'00"
C-15	25.00'	39.27'	35.36'	N 17°21'37" E	90°00'00"
C-16	226.00'	88.35'	87.25'	N 16°23'25" W	22°23'55"
C-16A	226.00'	16.25'	16.54'	N 25°32'52" W	86.00°
C-16B	226.00'	63.03'	62.82'	N 15°27'19" W	19.29°
C-16C	226.00'	8.78'	8.78'	N 08°21'13" W	21°13'00"
C-17	176.00'	224.20'	209.35'	N 31°15'11" E	72°58'17"
C-17A	176.00'	10.04'	20.03'	N 01°58'43" W	6°11'10"
C-17B	176.00'	60.38'	60.07'	N 11°06'34" E	19°39'01"
C-17C	176.00'	61.29'	60.98'	N 30°54'40" E	19°37'14"
C-17D	176.00'	54.99'	54.77'	N 49°50'22" E	17°54'11"
C-17E	176.00'	27.51'	27.48'	N 83°18'08" E	6°32'17"
C-18	176.00'	355.09'	297.88'	S 54°27'14" E	115°35'55"
C-18A	176.00'	61.29'	60.98'	N 77°43'26" E	19°37'14"
C-18B	176.00'	61.29'	60.98'	S 82°19'21" E	19°57'14"
C-18C	176.00'	61.29'	60.98'	S 62°22'07" E	19°57'14"
C-18D	176.00'	61.29'	60.98'	S 42°44'54" E	19°57'14"
C-18E	176.00'	61.29'	60.98'	S 14°52'47" E	35°47'00"
C-19	274.00'	416.04'	377.21'	S 40°09'11" E	86°59'50"
C-20	326.00'	447.11'	412.88'	S 44°21'41" E	78°34'52"
C-20A	326.00'	90.16'	89.88'	S 15°43'33" E	15°50'48"
C-20B	326.00'	65.01'	64.91'	S 62°05'31" E	11°25'35"
C-20C	326.00'	65.01'	64.91'	S 50°39'56" E	11°25'35"
C-20D	326.00'	65.01'	64.91'	S 39°14'20" E	11°25'35"
C-20E	326.00'	65.01'	64.91'	S 27°48'45" E	11°25'35"
C-20F	326.00'	65.01'	64.91'	S 16°23'09" E	11°25'35"
C-20G	326.00'	31.87'	31.86'	S 07°52'18" E	53°07'07"
C-21	326.00'	469.01'	429.60'	S 36°08'41" W	82°25'52"
C-21A	326.00'	31.87'	31.80'	S 02°17'34" E	93°52'22"
C-21B	326.00'	65.01'	64.91'	S 01°15'55" E	64.91°
C-21C	326.00'	65.01'	64.91'	S 17°37'30" W	11°25'35"
C-21D	326.00'	65.01'	64.91'	S 29°03'06" W	11°25'35"
C-21E	326.00'	65.01'	64.91'	S 40°28'41" W	11°25'35"
C-21F	326.00'	65.01'	64.91'	S 51°54'18" W	11°25'35"
C-21G	326.00'	65.01'	64.91'	S 63°19'52" W	11°25'35"
C-21H	326.00'	47.32'	47.27'	S 73°12'08" W	81°18'58"
C-22	474.00'	218.52'	216.40'	S 64°09'55" W	26°23'25"
C-22A	474.00'	62.18'	62.13'	S 73°38'08" W	73°05'57"
C-22B	474.00'	66.34'	66.34'	S 82°49'51" W	45°32'11"
C-22C	474.00'	89.75'	89.62'	S 92°23'40" W	10°50'56"
C-23	527.00'	341.71'	335.75'	S 69°32'43" W	37°09'02"
C-24	526.00'	63.81'	63.71'	N 89°18'18" W	11°12'54"
C-25	274.00'	81.37'	81.23'	N 89°13'30" W	11°12'54"
C-26	25.00'	39.27'	35.36'	S 34°05'37" E	90°01'46"
C-27	25.00'	39.27'	35.35'	S 55°55'09" E	89°59'46"
C-28	25.00'	39.27'	35.36'	N 59°53'30" W	90°00'00"
C-29	25.00'	39.27'	35.36'	N 34°06'30" E	90°00'00"
C-30	25.00'	39.27'	35.36'	S 55°53'30" E	90°00'00"
C-31	175.00'	48.78'	48.63'	S 02°54'21" E	15°58'18"
C-32	225.00'	59.87'	59.70'	S 02°32'55" E	15°14'47"
C-33	25.00'	39.27'	35.35'	S 34°28'16" W	89°19'29"
C-34	25.00'	39.27'	35.36'	N 15°03'49" W	84°41'21"
C-35	25.00'	40.94'	36.51'	N 13°11'23" E	93°49'03"
C-36	791.00'	238.31'	237.41'	N 68°43'48" E	17°15'43"
C-36A	791.00'	90.70'	90.65'	N 83°23'00" E	6°34'11"
C-37	791.00'	82.61'	82.57'	N 69°59'37" E	6°09'02"
C-36C	791.00'	65.00'	64.98'	N 75°00'22" E	4°42'29"
C-37	775.00'	102.36'	102.30'	N 81°08'41" E	7°34'08"
C-38	25.00'	40.27'	36.08'	S 48°55'12" E	92°18'06"
C-39	274.00'	383.20'	352.72'	S 37°17'44" W	80°07'46"
C-39A	274.00'	143.82'	141.99'	S 12°45'00" W	80°01'58"
C-39B	274.00'	127.34'	126.20'	S 40°34'40" W	26°37'42"
C-39C	274.00'	111.23'	111.45'	S 65°37'34" W	23°28'08"
C-40	526.00'	144.78'	144.31'	S 69°28'34" W	15°46'07"
C-40A	526.00'	43.22'	43.21'	S 73°00'22" W	44°27'20"
C-40B	526.00'	60.33'	60.30'	S 69°21'58" W	6°34'19"
C-40C	526.00'	41.21'	41.20'	S 63°50'10" W	4°29'18"
C-41	25.00'	37.80'	34.30'	N 77°01'52" W	86°37'26"
C-42	25.00'	39.27'	35.36'	N 11°16'51" E	90°00'00"
C-43	475.00'	174.79'	173.77'	N 68°49'14" E	21°04'46"
C-43A	475.00'	66.47'	66.41'	N 60°17'22" E	8°01'02"
C-43B	475.00'	79.69'	79.60'	N 69°06'17" E	9°36'47"
C-43C	475.00'	28.60'	28.59'	N 75°38'09" E	9°26'57"
C-44	525.00'	137.44'	137.00'	N 69°51'37" E	15°00'00"
C-44A	525.00'	48.46'	48.44'	N 74°42'58" E	5°17'19"
C-44B	525.00'	59.18'	59.15'	N 68°50'32" E	6°27'32"
C-44C	525.00'	29.80'	29.80'	N 63°59'12" E	3°15'09"
C-45	225.00'	187.80'	182.98'	N 38°28'57" E	47°49'21"
C-45A	225.00'	25.31'	25.30'	N 39°08'14" E	6°26'45"
C-45B	225.00'	63.00'	62.79'	N 47°53'55" E	16°02'34"
C-45C	225.00'	63.00'	62.79'	N 31°51'01" E	16°02'34"
C-45D	225.00'	36.49'	36.49'	N 19°11'00" E	9°17'27"
C-46	25.00'	43.22'	43.21'	S 73°00'22" W	44°27'20"
C-47	274.00'	375.79'	347.02'	S 44°21'41" E	78°34'52"
C-47A	274.00'	121.93'	120.93'	S 70°54'11" E	25°29'51"
C-47B	274.00'	253.86'	244.87'	S 31°39'45" E	53°05'00"
C-48	25.00'	39.27'	35.36'	S 32°22'56" E	89°58'03"
C-49	825.00'	108.98'	108.91'	S 81°08'41" W	7°34'08"
C-49A	825.00'	37.35'	37.34'	S 83°37'56" W	2°35'57"
C-49B	825.00'	71.64'	71.61'	S 79°30'52" W	4°58'31"
C-50	841.00'	259.85'	259.82'	S 69°30'51" W	17°42'11"
C-50A	841.00'	67.89'	67.89'	S 75°00'21" W	43°16'51"
C-50B	841.00'	67.98'	67.95'	S 70°24'48" W	43°57'53"
C-50C	841.00'	67.98'	67.95'	S 65°46'55" W	43°57'53"
C-50D	841.00'	55.91'	55.90'	S 61°33'42" W	34°48'33"
C-51	25.00'	48.48'	48.47'	N 68°04'27" W	11°10'63"
C-52	274.00'	430.24'	397.38'	N 32°22'56" E	89°58'03"
C-52A	274.00'	117.47'	116.57'	N 00°19'32" W	24°33'43"
C-52B	274.00'	117.87'	116.97'	N 24°16'48" E	24°38'54"
C-53	274.00'	102.39'	102.32'	N 49°22'21" E	21°37'12"
C-53A	274.00'	91.91'	91.48'	N 87°45'02" E	19°13'11"
C-53B	274.00'	137.71'	137.31'	N 69°51'37" E	15°00'00"
C-53C	274.00'	32.43'	32.43'	N 75°35'38" E	3°51'58"
C-53D	274.00'	64.99'	64.95'	N 70°17'15" E	7°04'46"
C-54	1026.00'	40.28'	40.28'	N 64°31'58" E	42°13'15"
C-54A	1026.00'	54.81'	54.80'	N 60°49'48" E	3°02'38"
C-54B	1026.00'	68.06'	68.05'	N 57°23'57" E	3°48'03"

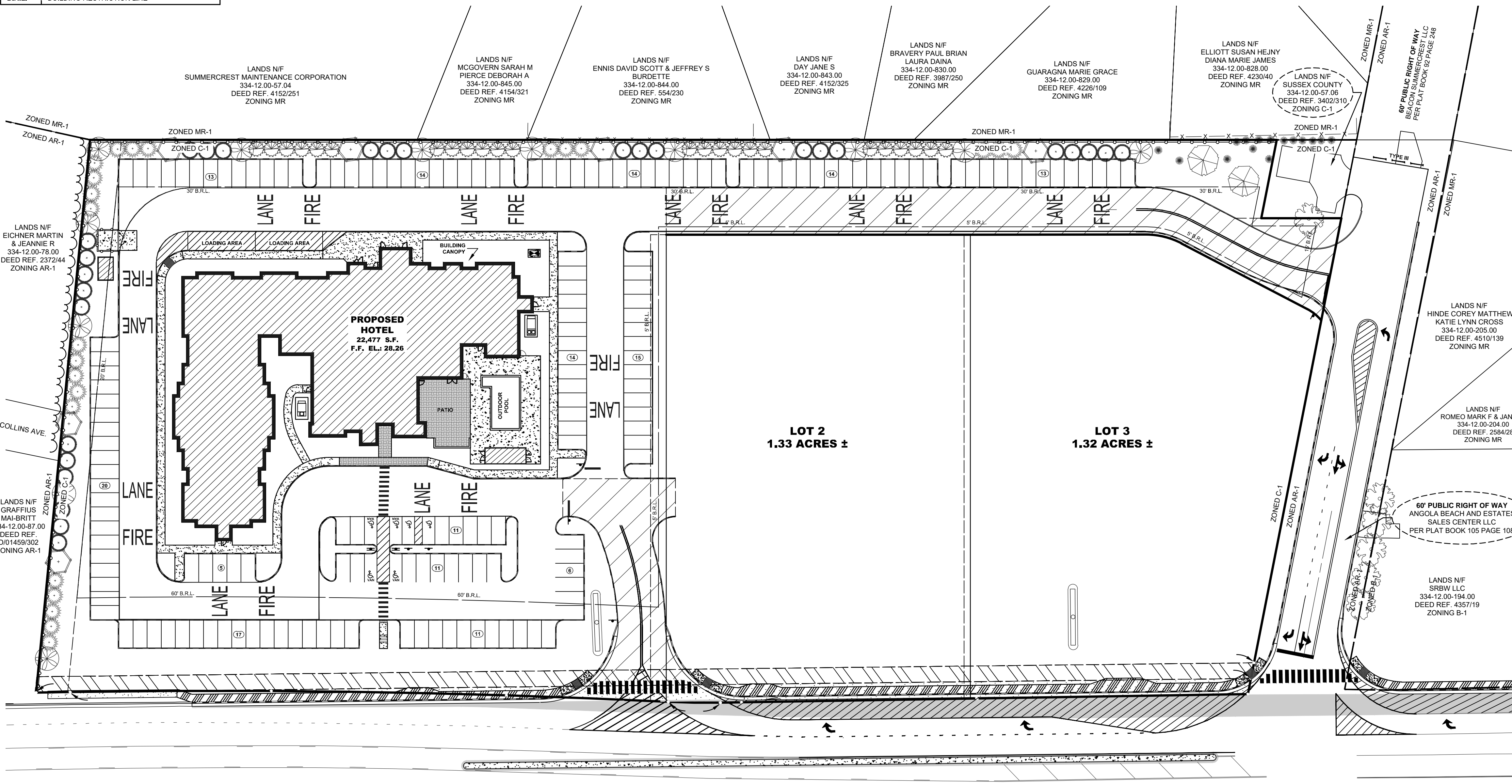
PROPOSED SUBDIVISION CURVE TABLE					
CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C-55	25.00'	35.82'	32.69'	S 83°40'42" E	81°38'43"
C-56	326.00'	138.93'	137.88'	S 59°05'51" E	24°25'00"
C-56A	326.00'	52.99'	52.99'	S 47°50'45" E	9°18'50"
C-56B	326.00'	85.93'	85.68'	S 59°43'16" E	15°06'11"
C-57	25.00'	35.70'	32.74'	S 26°22'02" E	81°48'37"
C-58	175.00'	146.07'	141.86'	S 38°26'57" W	47°49'21"
C-58A	175.00'	77.34'	76.71'	S 27°11'54" W	25°19'17"
C-58B	175.00'	68.73'	68.23'	S 51°06'35" W	22°30'04"
C-59	475.00'	124.35'	124.00'	S 69°51'37" W	19°00'00"
C-59A	475.00'	63.89'	63.85'	S 66°12'50" W	7°42'25"
C-59B	475.00'	475.00'	475.00'	S 73°42'50" W	71°12'35"
C-60	525.00'	193.15'	192.06'	S 66°49'44" W	21°04'46"
C-60A	525.00'	137.38'	136.99'	S 69°51'37" W	14°59'33"
C-60B	525.00'	55.77'	55.75'	S 59°19'28" W	6°05'13"
C-61	25.00'	39.27'	35.36'	N 72°58'23" W	30°00'00"
C-62	174.00'	68.02'	67.89'	N 19°26'38" W	22°23'55"
C-63	124.00'	157.96'	147.50'	N 31°15'11" E	72°59'17"
C-63A	124.00'	97.37'	94.89'	N 17°15'16" E	44°59'27"
C-63B	124.00'	60.59'	59.99'	N 53°44'54" E	27°59'50"
C-64	124.00'	350.18'	209.83'	S 54°27'14" E	115°35'55"
C-64A	124.00'	60.59'	59.99'	N 54°44'44" E	27°59'50"
C-64B	124.00'	189.59'	171.65'	S 40°27'19" E	67°36'04"
C-65	326.00'	167.80'	165.96'	S 11°24'02" E	29°29'31"
C-65A	326.00'	77.91'	77.72'		

COLONIAL OAKS LLC HOTEL

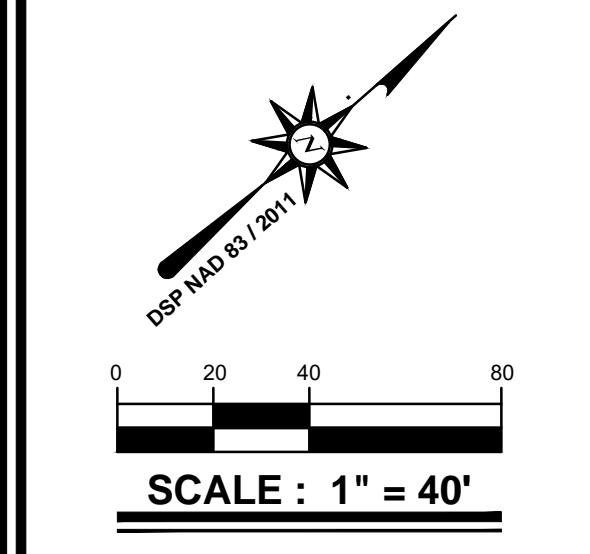
REHOBOTH BEACH SUSSEX COUNTY, DELAWARE



ABBREVIATIONS	
R.C.P.	REINFORCED CONCRETE PIPE
C.M.P.	CORRUGATED METAL PIPE
N-12 HP	HIGH PERFORMANCE POLYPROPYLENE PIPE
H.D.P.E.	HIGH DENSITY POLYETHYLENE PIPE
RD	ROOF DRAIN
C.B.	CATCH BASIN
S.D. MH	STORM DRAIN MANHOLE
SAN. MH	SANITARY SEWER MANHOLE
S	SANITARY SEWER LINE
C.O.	CLEAN OUT
INV.	INVERT
W	WATERLINE
W.V.	WATER VALVE
W.M.	WATER METER
D.I.P.	DUCTILE IRON PIPE
U.E.	UNDERGROUND ELECTRIC
O.E.	OVERHEAD ELECTRIC
U.T.	UNDERGROUND TELEPHONE
G	GAS LINE
G.V.	GAS VALVE
T.C.	TOP OF CURB
L.F.	LINEAR FEET
EL	ELEVATION
B.R.L.	BUILDING RESTRICTION LINE



SITE DATA	
1. OWNER OF RECORD:	ROUTE 24 CJ LLC 30045 EAGLES CREST RD MILTON, DE 19968
2. ENGINEER / SURVEYOR:	BECKER MORGAN GROUP INC. 312 WEST MAIN ST. SALISBURY, MARYLAND 21801 410-546-9100
3. PROPERTY MAP NUMBER:	334-12.00-57.07, 334-12.00-57.08, 334-12.00-57.03
4. ZONING CLASSIFICATION:	EXISTING: C-1 COMMERCIAL PROPOSED: C-1 COMMERCIAL
5. DEED SUMMARY:	BOOK 3976 PAGE 298
6. PLAT REFERENCE:	BOOK 138 PAGE 3
7. PRESENT USE:	VACANT LOT
8. PROPOSED USE:	HOTEL
9. TOTAL SITE AREA:	BEFORE R.O.W. DEDICATION: 162,613 SQ. FT. ± (3.73 ACRES ±) PROPOSED FIRST FLOOR FOOTPRINT: 22,477 SQ. FT. ± TOTAL HOTEL GSF: 71,936 SQ. FT. ±
10. BUILDING:	
11. IMPERVIOUS COVERAGE:	EXISTING: 14.48% (0.54 ACRES) PROPOSED: 70.51% (2.63 ACRES)
12. FLOOD HAZARD AREA:	ZONE X - AREA OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN FIRM MAP #10005C0332K, DATED 03/16/15
13. PARKING CALCULATIONS:	ARTICLE XXII HOTEL, MOTEL, LODGING INNS 1.5 SPACES PER GUEST ROOM + 1 SPACE PER 3 EMPLOYEES 104 GUEST ROOMS X 1.5 SPACES = 156 SPACES 1 SPACE PER 3 EMPLOYEES - 24 EMPLOYEES = 8 SPACES TOTAL REQUIRED = 164 SPACES TOTAL STANDARD SPACES PROVIDED = 172 SPACES TOTAL HANDICAP SPACES PROVIDED = 6 SPACES (4 VAN) TOTAL PARKING PROVIDED = 178 SPACES LOADING SPACES: 2 (25,000 - 100,000 S.F. MOTEL/HOTEL FLOOR AREA)
14. SETBACKS:	COMMERCIAL C-1 FRONT: 60 FT. SIDE: 20 FT. REAR: 30 FT.
15. BUILDING HEIGHT:	PERMITTED: 4 STORIES, 42 FT. PROPOSED: 41'-4" (42 FT. MAXIMUM)
16. SOURCE OF WATER:	TIDEWATER UTILITIES
17. SOURCE OF SEWER:	SUSSEX COUNTY ENGINEERING
18. SOURCE OF GAS:	CHESAPEAKE UTILITIES CORPORATION
19. SOURCE OF ELECTRIC:	DELMARVA POWER
20. SURVEY BENCHMARK:	NGIS VERTICAL: NAVD 88 - HOLT HORIZONTAL: NAD 83 - CORS
21. MONUMENTATION:	EXISTING: 8 FOUND PROPOSED: 0 SET
22. ROAD CLASSIFICATION:	JOHN J. WILLIAMS HIGHWAY: MAJOR COLLECTOR (35 M.P.H.)
23. TRANSPORTATION IMPROVEMENT DISTRICT:	THIS PROJECT IS LOCATED IN THE HENLOPEN T.I.D.
24. INVESTMENT LEVEL:	LEVEL 1



PROJECT TITLE
COLONIAL OAKS LLC HOTEL
JOHN J. WILLIAMS HIGHWAY
REHOBOTH BEACH
SUSSEX COUNTY, DE 19971

GENERAL NOTES:	
1.	BOUNDARY AND TOPOGRAPHIC SURVEY DATA SHOWN HEREON WAS PREPARED BY BECKER MORGAN GROUP, SALISBURY, MD, IN JANUARY/FEBRUARY OF 2017. VERTICAL DATUM IS BASED ON NAVD 88. HORIZONTAL DATUM IS BASED ON DELAWARE STATE PLANE NAD 83 (1991).
2.	THE BOUNDARY LINES PORTRAYED HEREON HAVE BEEN ESTABLISHED BASED SOLELY ON PHYSICAL EVIDENCE DISCOVERED IN THE FIELD IN CONJUNCTION WITH DETERMINATIONS DERIVED FROM SOURCE OF TITLE AND ADJACENT DEED RECORD INFORMATION.
3.	PROPERTY SHOWN HEREON IS SUBJECT TO ANY RIGHT-OF-WAY, EASEMENTS, RESTRICTIONS, ETC. AS MAY BE SHOWN OR NOTED IN ANY RECORD, PUBLIC OR OTHERWISE, OR ANY REQUIREMENT OR REGULATION OF ANY PUBLIC AGENCY.
4.	THE EXISTING UTILITIES SHOWN WERE TAKEN FROM THE BEST AVAILABLE RECORDS. THE CONTRACTOR SHALL CONSULT WITH DELMARVA 1-800-292-8555 TO VERIFY THEIR EXACT LOCATION PRIOR TO THE START OF ANY CONSTRUCTION. ANY DAMAGE INCURRED TO ANY UTILITIES SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTORS EXPENSE. IF THE CONTRACTOR RELIES ON THE UTILITY LOCATIONS SHOWN HEREON, HE DOES SO AT HIS OWN RISK AND WILL NOT BE ENTITLED TO ADDITIONAL COMPENSATION DUE TO TIME DELAYS FROM SAID RELIANCE.
5.	THIS SITE IS NOT LOCATED WITHIN THE ONE HUNDRED YEAR FLOOD PLAIN, BASED ON FEMA MAPS 10005C0332K, PANEL 332 OF 660, DATED MARCH 16, 2015.
6.	THIS SITE IS LOCATED WITHIN THE ENVIRONMENTALLY SENSITIVE DEVELOPING DISTRICT (ES-1) BASED ON SUSSEX COUNTY, DELAWARE ZONING MAP, DATED MAY 20, 2013.
7.	ALL FIRE LANES, FIRE HYDRANTS AND FIRE DEPARTMENT CONNECTIONS SHALL BE MARKED IN ACCORDANCE WITH THE DELAWARE STATE FIRE PREVENTION REGULATIONS.
8.	THE PROPOSED BUILDING WILL BE PROTECTED BY AN AUTOMATIC SPRINKLER SYSTEM.

BUILDING DATA - FIRE MARSHAL						
BUILDING	BUILDING NUMBER	FOOTPRINT AREA	NUMBER OF FLOORS	GROSS FLR. AREA	BLDG. HEIGHT	BLDG. TYPE (IFPA)
PROPOSED HOTEL	①	22,477 S.F.	4	71,936 S.F.	41'-4"	TYPE V-III

OWNERS CERTIFICATION

WE, ROUTE 24 CJ LLC, HEREBY CERTIFY THAT WE ARE THE OWNER OF THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN, THAT THE PLAN WAS MADE AT OUR DIRECTION, AND THAT WE ACKNOWLEDGE THE SAME TO BE OUR ACT AND DESIRE THE PLAN TO BE DEVELOPED AS SHOWN IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS.

SIGNATURE: _____ DATE: _____

ENGINEERS CERTIFICATION

I, JEFFREY A. HARMAN, HEREBY CERTIFY THAT I AM A REGISTERED ENGINEER IN THE STATE OF DELAWARE, THAT THE INFORMATION SHOWN HEREON HAS BEEN PREPARED UNDER MY SUPERVISION AND TO MY BEST KNOWLEDGE AND BELIEF REPRESENTS GOOD ENGINEERING PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.

JEFFREY A. HARMAN P.E. NO. _____ DATE: _____

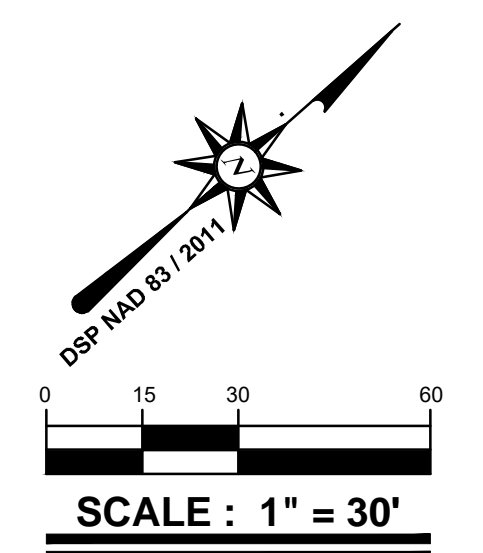
SURVEY MONUMENT LEGEND		
ITEM	EXISTING	PROPOSED
UNMARKED POINT	○	○
CONCRETE MONUMENT	◻ FCM	
IRON ROD	⦿ FIR	
IRON ROD W/ CAP		● SIRC

LEGEND					
ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED
CONCRETE CURB & GUTTER		---	SANITARY GRAVITY SEWER LINE, SIZE & FLOW DIRECTION	→ EX. 10" S	→ 10" S
CONCRETE SIDEWALK, SLAB / PARKING		---	SANITARY SEWER FORCE MAIN, SIZE & FLOW DIRECTION	→ EX. 10" F.M.	→ 12" F.M.
IMPERVIOUS SURFACED ROAD, DRIVE OR LOT		---	SANITARY SEWER MANHOLE (S.D. MH.)	⊙	⊙
INDIVIDUAL TREE OR BUSH	●	●	SANITARY SEWER CLEANOUT	⊕	⊕
WIRE FENCE	---x---	---	WATER MAIN & SIZE	EX. 10" W	12" W
CHAINLINK FENCE	---x---	---	FIRE HYDRANT	⊗ F.H.	⊗ F.H.
STOCKADE FENCE	---x---	---	WATER VALVE (W.V.) OR METER (W.M.)	⊙ W.M. / W.V.	⊙ W.M. / W.V.
STRUCTURE (CONCRETE, WOOD, METAL, ETC.)	---	---	STORM DRAIN MANHOLE (S.D. MH.)	⊕	⊕
DRAINAGE DITCH OR SWALE	---	---	STORM DRAIN LINE (CMP OR RCP)	---	---
EMBANKMENT SIDESLOPES (DOWN)	---	---	CATCH BASIN	⊕	⊕
CONTOUR	---	---	UTILITY POLE W/ OVERHEAD SERVICE (TELEPHONE OR ELECTRIC OR BOTH)	⊕	⊕
ELEVATION SPOT SHOT	43.55	25.10 25.50 T.C. 25.00 B.C.	UNDERGROUND ELECTRIC	--- U.E. ---	--- U.E. ---
BENCH MARK	⊕	⊕	UNDERGROUND TELEPHONE	--- U.T. ---	--- U.T. ---
PROPERTY OR RIGHT-OF-WAY LINE	---	---	UNDERGROUND GAS MAIN	--- EX. 2" G ---	---
CENTERLINE	---	---	PAVEMENT TO BE REMOVED	---	---
LIGHT POLE	⊕	⊕			
CONSTRUCTION NOTE	---	---			

SHEET INDEX	
COVER SHEET	COVER SHEET & OVERALL LAYOUT
C-001	EXISTING CONDITIONS AND DEMOLITION PLANS
C-101	EXISTING CONDITIONS & DEMOLITION PLAN
SITE PLANS	
C-201	SITE PLAN
UTILITY PLANS	
C-301	UTILITIES PLAN
GRADING PLANS	
C-401	GRADING PLAN
EROSION & SEDIMENT CONTROL PLANS	
C-500	SEDIMENT & STORMWATER COVER SHEET
C-501	SCHEMATIC PRE - CONSTRUCTION SITE STORMWATER MANAGEMENT PLAN
C-502	SCHEMATIC CONSTRUCTION SITE STORMWATER MANAGEMENT PLAN
C-503	SCHEMATIC POST - CONSTRUCTION SITE STORMWATER MANAGEMENT PLAN
C-504	POST - CONSTRUCTION SITE STORMWATER MANAGEMENT - STORMTECH DETAILS
C-505	CONSTRUCTION SITE STORMWATER NOTES AND DETAILS
C-506	CONSTRUCTION SITE STORMWATER NOTES AND DETAILS
C-507	CONSTRUCTION SITE STORMWATER NOTES AND DETAILS
CONSTRUCTION DETAILS	
C-901	CONSTRUCTION DETAILS
C-902	CONSTRUCTION DETAILS

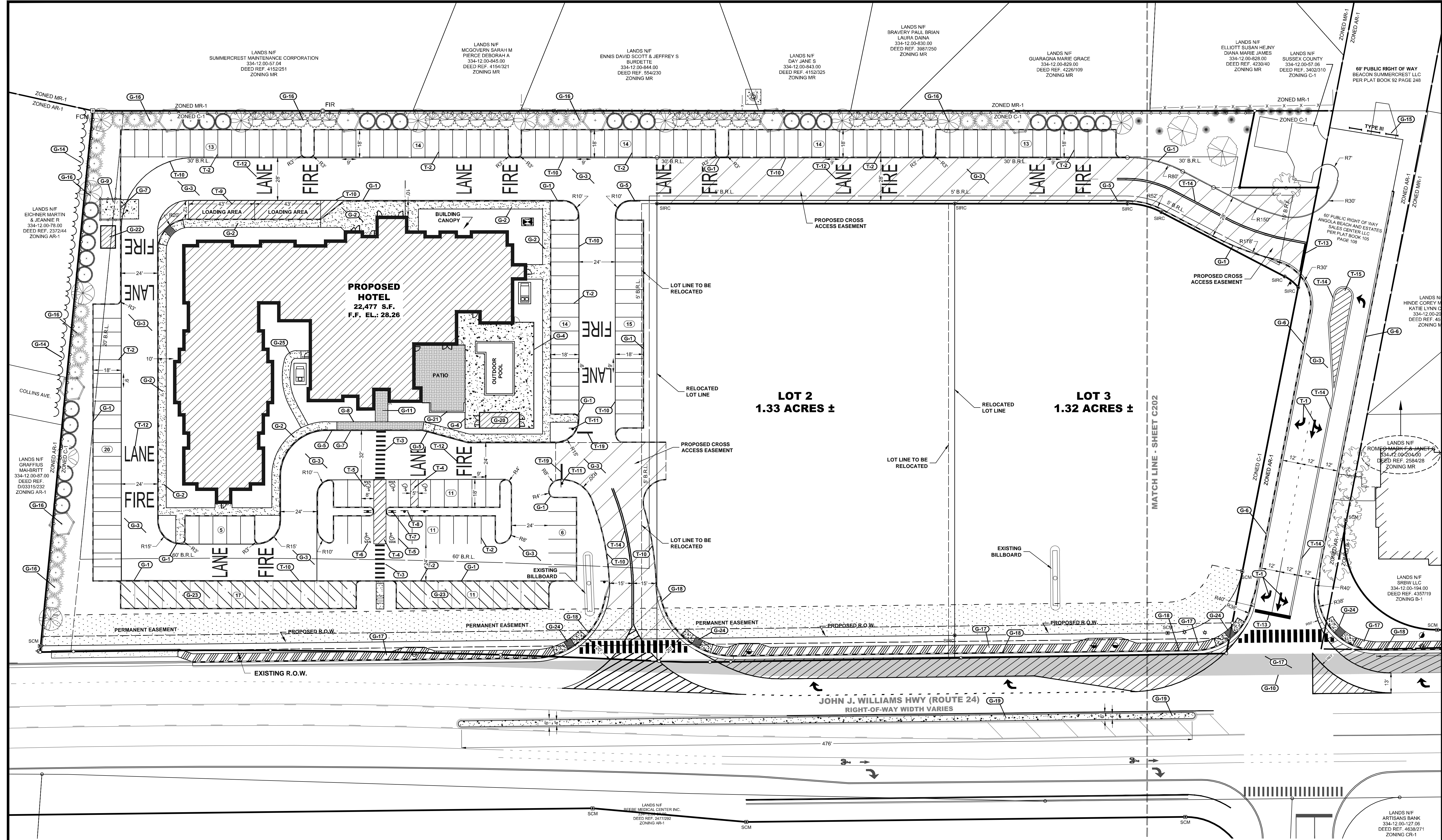
811
Know what's below.
Call before you dig.
MISS UTILITY PHONE 1-800-292-8655
PROTECT YOURSELF, GIVE THREE WORKING DAYS NOTICE

ISSUE BLOCK		
MARK	DATE	DESCRIPTION
3	01/03/19	PLANNING AND ZONING SUBMISSION SET
2	11/21/18	WHITING TURNER PRICING SUBMISSION SET
1	10/29/18	DELAWARE STATE FIRE MARSHAL COMMENT REVISION V.1
PROJECT NO.:	2016286.02	
DATE:	10/09/2018	
SCALE:	1" = 40'	
DRAWN BY:	S.H.P. / PROJ. MGR.: J.A.H.	
SHEET		
C-001		
COPYRIGHT 2018		



PROJECT TITLE
COLONIAL OAKS LLC HOTEL
JOHN J. WILLIAMS HIGHWAY
REHOBOTH BEACH
SUSSEX COUNTY, DE 19971

SHEET TITLE
SITE PLAN



FIRE MARSHAL GENERAL NOTES

- ALL FIRE LANES, FIRE HYDRANTS, AND FIRE DEPARTMENT CONNECTIONS SHALL BE MARKED IN ACCORDANCE WITH THE DELAWARE STATE FIRE PREVENTION REGULATIONS (DSFPR).
- ALL BUILDING WITH SPRINKLER SYSTEMS SHALL BE MONITORED AND KNOX BOXES SHALL BE PROVIDED AND INSTALLED ADJACENT TO THE MAIN ENTRANCE DOOR.
- ADDRESS NUMBERS OF AT LEAST 12 INCHES IN HEIGHT MUST BE PLACED ON THE STREET SIDE OF THE BUILDING VISIBLE FROM THE STREET.
- ANY NATURAL OR LP GAS BOTTLES, METERS, REGULATORS, ETC. MUST HAVE IMPACT PROTECTION.
- ANY GAS FIRED HVAC EQUIPMENT MUST BE EQUIPPED WITH EMERGENCY CUT OFF SWITCHES REMOTELY LOCATED.
- FIRE DEPARTMENT CONNECTION TO BE 5' STORZE, 30° ANGLE.
- THE PROPOSED BUILDING SHALL BE PROTECTED BY AUTOMATIC SPRINKLERS IN ACCORDANCE WITH NFPA 13.

REQUIRED PERMETER ACCESS TO BUILDING THAT IS SERVED BY AUTOMATED SPRINKLERS
4 STORY BUILDING - RESIDENTIAL - 75% OF PERIMETER
PERIMETER OF BUILDING = 892 L.F.
REQUIRED - 892 L.F. x 0.75 = 669 L.F.
PROVIDED - = 728 L.F.

STRIPING & SIGNAGE CONSTRUCTION NOTES

- T-1 PROPOSED PAINTED WHITE ARROW IN ACCORDANCE WITH THE LATEST "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES"
- T-2 PROPOSED PAINTED STRIPING - 4" WIDE SOLID WHITE LINE (TYP.)
- T-3 PROPOSED PAINTED THERMO "PIANO KEY" PEDESTRIAN CROSSWALK - SEE DETAIL SHEET C-903.
- T-4 PROPOSED PAINTED STRIPING - 4" WIDE SOLID ACCESSIBLE BLUE LINES, 45° @ 4' O.C. SPACING (TYP.).
- T-5 PROPOSED PAINTED STRIPING - 4" WIDE SOLID BLUE ACCESSIBLE PARKING SPACE (TYP.).
- T-6 PROPOSED THERMO ACCESSIBLE SYMBOL, PAINTED ACCESSIBLE BLUE (TYP.). SEE DETAIL SHEET C-903.
- T-7 PROPOSED "VAN ACCESSIBLE HANDICAP PARKING" SIGN, 4 SIGNS REQUIRED, DOUBLE MOUNTED ON 2 POSTS, SEE DETAIL SHEET C-901.
- T-8 PROPOSED "ACCESSIBLE HANDICAP PARKING" SIGN, 2 REQUIRED, SEE DETAIL SHEET C-901.
- T-9 PROPOSED PAINTED STRIPING - 4" WIDE SOLID WHITE LINES, 45° @ 4' O.C. SPACING (TYP.).
- T-10 PROPOSED EPOXY RESIN STRIPING - 4" WIDE SOLID YELLOW FIRE LANE (TYP.). IN ADDITION, FIRE LANE STRIPING REQUIRES THAT CURB, WHEN PRESENT, IS ALSO PAINTED YELLOW IN ACCORDANCE WITH THE DSFPR.
- T-11 PROPOSED R1-1 STOP SIGN.
- T-12 PROPOSED PAINTED "FIRE LANE" TEXT ON PAVEMENT. WORD HEIGHT SHALL BE 10" IN HEIGHT AND 20" IN WIDTH. DISTANCE BETWEEN THE WORD "FIRE" AND "LANE" SHALL BE NO GREATER THAN 30".
- T-13 PROPOSED THERMO STOP BAR - 16" WIDE PLACED 4' BEHIND PEDESTRIAN CROSSWALK.
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- T-15 PROPOSED PAINTED STRIPING - 4" WIDE SOLID YELLOW LINES, 45° @ 4' O.C. SPACING (TYP.).
- T-16 PROPOSED PAINTED STRIPING - 4" WIDE SOLID YELLOW LINES, 45° @ 4' O.C. SPACING (TYP.).
- T-17 PROPOSED STRIPING TO TERMINATE AND TIE-INTO EXISTING SR 24 STRIPING.
- T-18 PROPOSED 5" DASHED WHITE EPOXY RESIN PAVEMENT STRIPING, 2" LINE & 6" GAP.
- T-19 PROPOSED PAINTED WHITE STOP BAR - 16" WIDE.

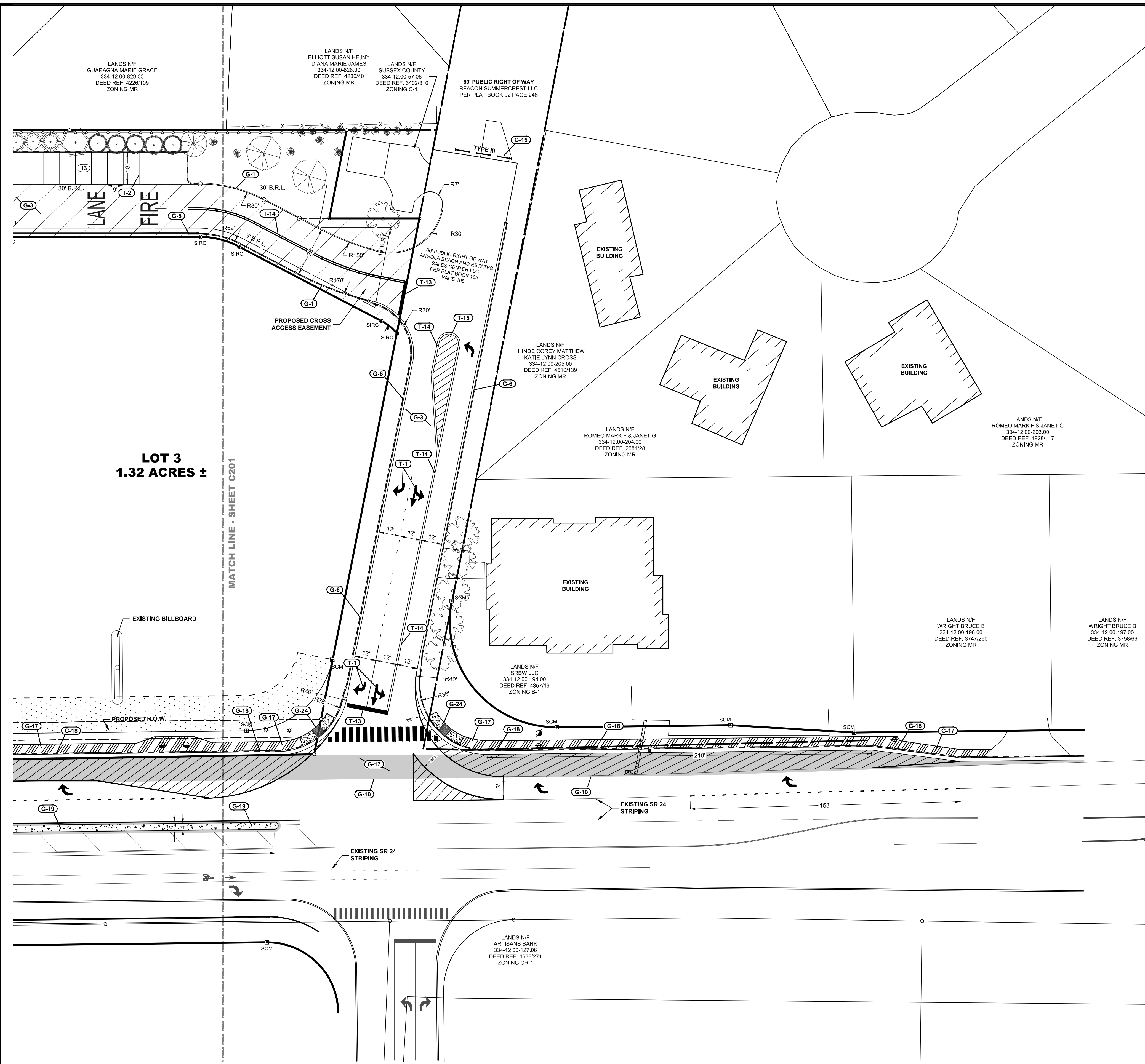
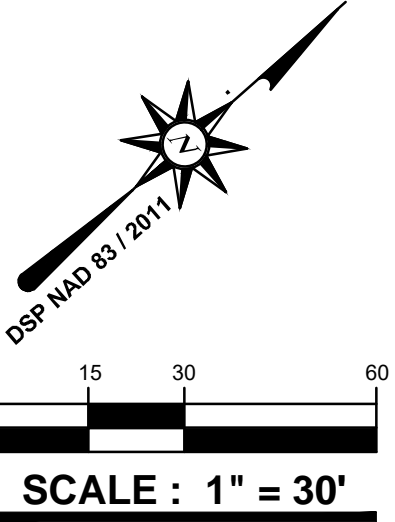
GENERAL CONSTRUCTION NOTES

- G-1 PROPOSED P.C.C. CURB - TYPE 1 (MODIFIED 6") SEE DETAIL, SHEET C-901. USE ON SITE EXCEPT WHERE SPECIFIED.
- G-2 PROPOSED COMBINATION SIDEWALK AND CURB. SEE COMBINATION SIDEWALK AND CURB DETAIL - SW-3E, SHEET C-902.
- G-3 INSTALL PROPOSED FULL DEPTH - HEAVY DUTY PAVEMENT SECTION. SEE DETAIL, SHEET C-902.
- G-4 PROPOSED 6 FT. HIGH, ORNAMENTAL FENCING. SEE SHEET C-901 AND PROJECT SPECIFICATIONS FOR DETAIL.
- G-5 CONTRACTOR TO TAPER LAST 4" OF CURB. SEE CURB TAPER DETAIL, SHEET C-901.
- G-6 PROPOSED INTEGRAL P.C.C. CURB & GUTTER TYPE 3, (DELDOT STANDARD NO. C-1, TYPE 3-8) SEE DETAIL, SHEET C-901.
- G-7 CONTRACTOR TO DEPRESS CURB. SEE P.C.C. CURB DETAIL, SHEET C-902.
- G-8 PROPOSED BRICK PAVEMENT PLAZA ENTRANCE. SEE LANDSCAPE PLANS AND SPECIFICATIONS FOR DETAILS.
- G-9 PROPOSED DUMPSTER / RECYCLING BIN ENCLOSURE W/ FENCE SURROUND. SEE ARCHITECTURAL PLANS FOR DETAILS.
- G-10 INSTALL PROPOSED HEAVY DUTY PAVEMENT AND TIE-IN TO EXISTING SR 24 PAVING.
- G-11 INSTALL ACCESSIBLE RAMP IN ACCORDANCE WITH LATEST A.D.A. STANDARDS. 12:1 MAX SLOPE. SEE DETAIL, SHEET C-902.
- G-12 PROPOSED 8" THICK CONCRETE SLAB. SEE CONCRETE SLAB - MECHANICAL / DUMPSTER AREA DETAIL, SHEET C-902.
- G-13 PROPOSED POOL EQUIPMENT BUILDING. SEE ARCHITECTURAL PLANS FOR DETAILS.
- G-14 CONTRACTOR TO CLEAR AWAY THE EXISTING TREE LINE AND/OR ANY SHRUBBERY TO PROPERTY LINE.
- G-15 CONTRACTOR TO PROVIDE THREE (3) TYPE III BARRICADES AT EDGE OF PROPOSED PAVEMENT. SEE DETAIL, SHEET C-901.
- G-16 PROPOSED LANDSCAPING TO PROVIDE VISUAL SCREEN FOR ADJACENT PROPERTIES. SEE LANDSCAPING PLAN L-101 FOR DETAILS.
- G-17 INSTALL CURB RAMP PER DELDOT STANDARD NO. C-2 CURB RAMP, TYPE 2.
- G-18 PROPOSED INTEGRAL P.C.C. CURB & GUTTER TYPE 1 (DELDOT STANDARD NO. C-1, TYPE 1-8) SEE DETAIL, SHEET C-901.
- G-19 PROPOSED P.C.C. CURB TYPE 2 (TYP.) FOR CENTER ISLAND, 4.0' TOTAL WIDTH. SEE DETAIL, SHEET C-901.
- G-20 PROPOSED ACCESSORY BUILDING FOR POOL EQUIPMENT AND STORAGE. SEE ARCHITECTURAL PLANS FOR DETAILS.
- G-21 PROPOSED HIGH FEATURE WALL. SEE ARCHITECTURAL PLANS FOR DETAILS.
- G-22 PROPOSED LANDSCAPE / MAINTENANCE STORAGE BUILDING. SEE ARCHITECTURAL PLANS FOR DETAILS.
- G-23 PER SUSSEX COUNTY PLANNING & ZONING THIS PARKING IS TO BE CONSTRUCTED AT A LATER DATE TO BE DETERMINED BY THE PROPERTY OWNER WHEN PARKING DEMAND DICTATES IT IS NEEDED.
- G-24 INSTALL CONCRETE SIDEWALK PER DELDOT STANDARD NO. M-3. SEE DETAIL, SHEET C-901.
- G-25 INSTALL CONCRETE SIDEWALK PER BMG STANDARD NO. SW-03C. SEE DETAIL, SHEET C-901.

ISSUE BLOCK	
MARK	DATE
3	01/03/19
2	11/21/18
1	10/29/18

PROJECT NO.: 2016286.02
DATE: 10/09/2018
SCALE: 1" = 30'
DRAWN BY: S.H.P. / PROJ. MGR.: J.A.H.

SHEET
C-201
COPYRIGHT 2018



LOT 3
1.32 ACRES ±

MATCH LINE - SHEET C201

FIRE MARSHAL GENERAL NOTES

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- T-13 PROPOSED THERMO STOP BAR - 16" WIDE PLACED 4' BEHIND PEDESTRIAN CROSSWALK.
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- G-2 PROPOSED COMBINATION SIDEWALK AND CURB. SEE COMBINATION SIDEWALK AND CURB DETAIL - SW-3E, SHEET C-902.
- G-3 INSTALL PROPOSED FULL DEPTH - HEAVY DUTY PAVEMENT SECTION. SEE DETAIL, SHEET C-902.
- G-4 PROPOSED 6 FT. HIGH, ORNAMENTAL FENCING. SEE SHEET C-901 AND PROJECT SPECIFICATIONS FOR DETAIL.
- G-5 CONTRACTOR TO TAPER LAST 4' OF CURB. SEE CURB TAPER DETAIL, SHEET C-901.
- G-6 PROPOSED INTEGRAL P.C.C. CURB & GUTTER TYPE 3, (DELDOT STANDARD NO. C-1, TYPE 3-8) SEE DETAIL, SHEET C-901.
- G-7 CONTRACTOR TO DEPRESS CURB. SEE P.C.C. CURB DETAIL, SHEET C-902.
- G-8 PROPOSED BRICK PAVEMENT PLAZA ENTRANCE. SEE LANDSCAPE PLANS AND SPECIFICATIONS FOR DETAILS.
- G-9 PROPOSED DUMPSTER / RECYCLING BIN ENCLOSURE W/ FENCE SURROUND. SEE ARCHITECTURAL PLANS FOR DETAILS.
- G-10 INSTALL PROPOSED HEAVY DUTY PAVEMENT AND TIE-IN TO EXISTING SR 24 PAVING.
- G-11 INSTALL ACCESSIBLE RAMP IN ACCORDANCE WITH LATEST A.D.A. STANDARDS, 12:1 MAX SLOPE. SEE DETAIL, SHEET C-902.
- G-12 PROPOSED 8" THICK CONCRETE SLAB - MECHANICAL / DUMPSTER AREA DETAIL, SHEET C-902.
- G-13 PROPOSED POOL EQUIPMENT BUILDING. SEE ARCHITECTURAL PLANS FOR DETAILS.
- G-14 CONTRACTOR TO CLEAR AWAY THE EXISTING TREE LINE AND/OR ANY SHRUBBERY TO PROPERTY LINE.
- G-15 CONTRACTOR TO PROVIDE THREE (3) TYPE III BARRICADES AT EDGE OF PROPOSED PAVEMENT. SEE DETAIL, SHEET C-901.
- G-16 PROPOSED LANDSCAPING TO PROVIDE VISUAL SCREEN FOR ADJACENT PROPERTIES. SEE LANDSCAPING PLAN L-101 FOR DETAILS.
- G-17 INSTALL CURB RAMP PER DELDOT STANDARD NO. C-2 CURB RAMP, TYPE 2.
- G-18 PROPOSED INTEGRAL P.C.C. CURB & GUTTER TYPE 1, (DELDOT STANDARD NO. C-1, TYPE 1-8) SEE DETAIL, SHEET C-901.
- G-19 PROPOSED P.C.C. CURB TYPE 2 (TYP.) FOR CENTER ISLAND, 4' TOTAL WIDTH. SEE DETAIL, SHEET C-901.
- G-20 PROPOSED ACCESSORY BUILDING FOR POOL EQUIPMENT AND STORAGE. SEE ARCHITECTURAL PLANS FOR DETAILS.
- G-21 PROPOSED HIGH FEATURE WALL. SEE ARCHITECTURAL PLANS FOR DETAILS.
- G-22 PROPOSED LANDSCAPE / MAINTENANCE STORAGE BUILDING. SEE ARCHITECTURAL PLANS FOR DETAILS.
- G-23 PER SUSSEX COUNTY PLANNING & ZONING THIS PARKING IS TO BE CONSTRUCTED AT A LATER DATE TO BE DETERMINED BY THE PROPERTY OWNER WHEN PARKING DEMAND DICTATES IT IS NEEDED.
- G-24 INSTALL CONCRETE SIDEWALK PER DELDOT STANDARD NO. M-3. SEE DETAIL, SHEET C-901.
- G-25 INSTALL CONCRETE SIDEWALK PER BMG STANDARD NO. SW-33C. SEE DETAIL, SHEET C-901.

PROJECT TITLE

**COLONIAL
OAKS LLC
HOTEL**
JOHN J. WILLIAMS HIGHWAY
REHOBOTH BEACH
SUSSEX COUNTY, DE 19971

SHEET TITLE

SITE PLAN

ISSUE BLOCK

NO.	DATE	DESCRIPTION
3	01/03/19	PLANNING AND ZONING SUBMISSION SET
2	11/21/18	WHITING TURNER PRICING SUBMISSION SET
1	10/29/18	DELAWARE STATE FIRE MARSHAL COMMENT REVISION V.1

MARK DATE DESCRIPTION

LAYER/STATE: C-202

PROJECT NO.: 2016286.02

DATE: 10/09/2018

SCALE: 1" = 30'

DRAWN BY: S.H.P. | PROJ. MGR.: J.A.H.

SHEET

C-202

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PRELIMINARY SITE PLAN FOR BAYWOOD GARDEN VILLAS

PHASE 1

SUSSEX COUNTY, DELAWARE
FOR
BAYWOOD, LLC

SITE DATA:

OWNER: BAYWOOD, LLC
34026 ANNA'S WAY
SUITE 1
LONG NECK, DE 19966

**APPLICANT/
DEVELOPER:** BAYWOOD, LLC
34026 ANNA'S WAY, SUITE 1
LONG NECK, DE 19966
PHONE: 302.945.9300
FAX: 302.945.4032
CONTACT: ROBERT TUNHELL III

ENGINEER: SOLUTIONS IPEM
303 N. BEDFORD STREET
GEORGETOWN, DE 19947
PHONE: 302.297.5215
CONTACT: JASON PALKIEWICZ, PE

- TAX MAP:**
2-34-23.00 PARCEL 273.05 & PJO PARCEL 270.00
PHASE 1 AREA DISTURBED = 24.35 ± ACRES
- PROPOSED USE:**
209 MULTIFAMILY UNITS (209 UNITS / 17.48 AC = 11.96 UNIT/AC)
- EXISTING ZONING:**
C-1 (17.48 AC ±)
- BUILDING SETBACKS:**
FRONT: 40'
SIDE: 10'
REAR: 10'
MAXIMUM BUILDING HEIGHT: 42'
- FLOOD ZONE:**
THE PROPERTY IS LOCATED WITHIN FLOOD ZONE X. (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN), PER FIRM MAP NUMBER 10005C0340K & 10005C43M, MAP REVISED MARCH 16, 2015.
- SOIL TYPES:**
FRA - FORT MOIT-HENLOPEN COMPLEX - HYDROLOGIC SOIL GROUP A
FmA - FORT MOIT LOAMY SAND - HYDROLOGIC SOIL GROUP A
HpB - HENLOPEN LOAMY SAND - HYDROLOGIC SOIL GROUP A
HuA - HURLOCK LOAMY SAND - HYDROLOGIC SOIL GROUP A/D
- WATER SUPPLY:**
TIDENWATER UTILITY COMPANY
LONG NECK WATER COMPANY
- SANITARY SEWER:**
BI-LAND BAYS PRESERVATION COMPANY

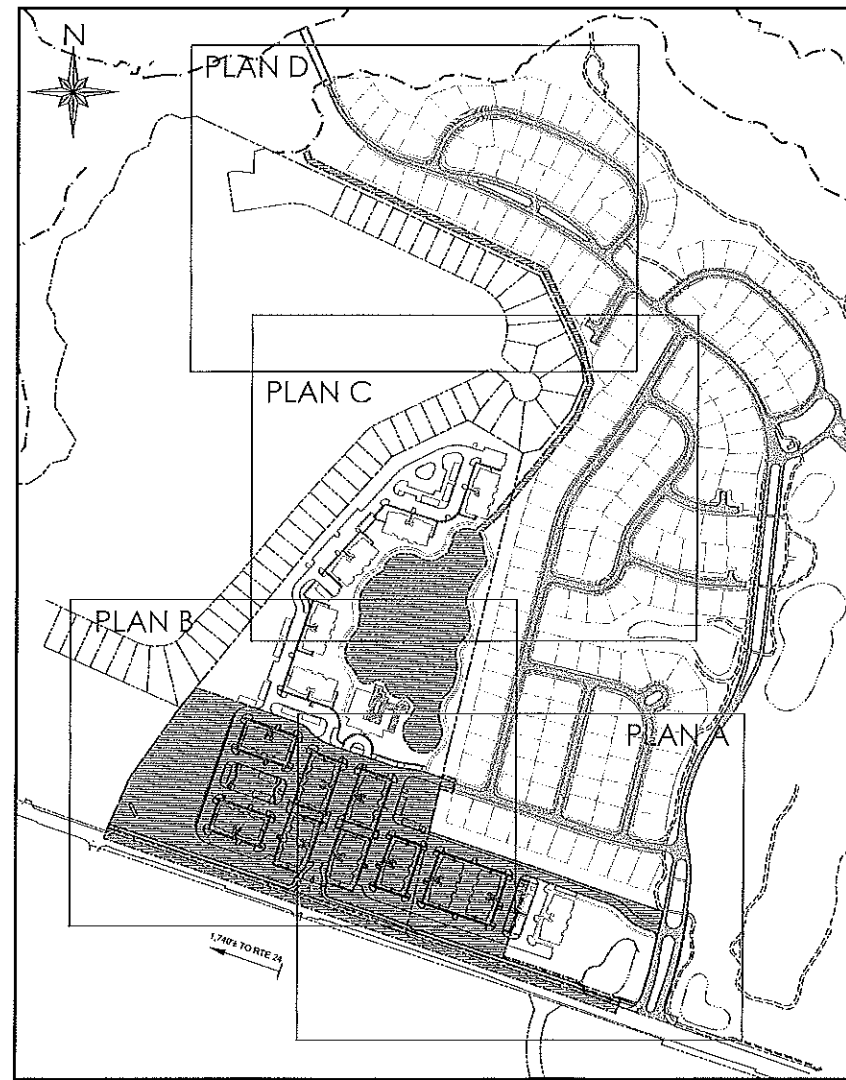
NOTES:
1. ALL ON-SITE DRIVE AISLES AND PARKING AREAS ARE PRIVATE AND SHALL BE MAINTAINED BY THE OWNER UNTIL DEDICATION TO THE HOMEOWNERS ASSOCIATION. THE PERPETUAL MAINTENANCE OF THE STREETS SHALL BE BY THE RESPECTIVE ORGANIZATION.

2. ROUTE 23 (LONG NECK ROAD) IMPROVEMENTS SHALL BE PER THE APPROVED DELAWARE DEPARTMENT OF TRANSPORTATION ENTRANCE PLANS DATED 3/15/2007 SIGNED BY MARC COTE.

3. SURVEY: THE BOUNDARY AND TOPOGRAPHIC INFORMATION FOR THIS PLAN WAS ADAPTED FROM ELECTRONIC FILES PROVIDED BY DAVIS, BOWEN & FRIEDEL, INC. TITLED 'BAYWOOD TOWN CENTER', DATED FEBRUARY 2003. A FIELD SURVEY WAS COMPLETED BY McCRONE INC. IN SEPTEMBER 2005. BASE DATA INCLUDING AERIAL SURVEY PROVIDED BY THE CLIENT.

PARKING CALCULATIONS

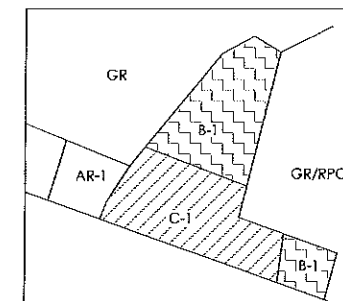
209 MULTIFAMILY UNITS	REQUIRED 370 SPACES*	PROPOSED 405 SPACES**
* 209 MULTIFAMILY UNITS 2 SPACES PER UNIT FOR 1st 50 UNITS = 100 SPACES 15% REDUCTION FOR 51 TO 200 UNITS = (150 x 2 x 85%) = 255 SPACES 20% REDUCTION FOR REMAINDER (9 x 2 x 80%) = 15 SPACES 100 + 255 + 15 = 370 SPACES TOTAL		** 370 SURFACE SPACES 35 GARAGE SPACES 370 + 35 = 405 SPACES TOTAL



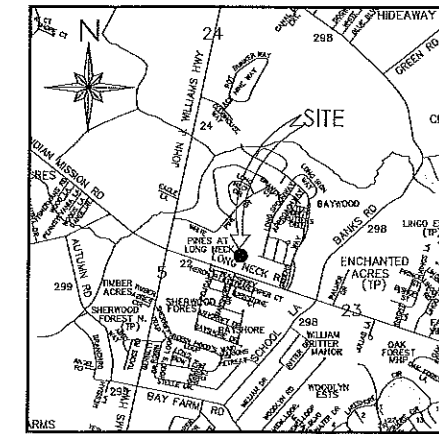
SITE PLAN
1" = 300'

SHEET INDEX

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



EXISTING ZONING KEY PLAN
N.T.S.



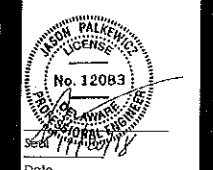
VICINITY MAP
SCALE: 1" = 2,000' ±

LEGEND

	EXISTING	PROPOSED
PROPERTY LINE	---	---
ZONING LINE	---	N/A
SETBACK LINE	---	N/A
PROPERTY CORNER (NOT SPECIFIED)	○	N/A
CONCRETE MONUMENT FOUND	CMF □	N/A
IRON PIPE FOUND	IPF ●	N/A
MAJOR CONTOUR	--- 5 ---	N/A
MINOR CONTOUR	---	N/A
SPOT ELEVATION	N/A	19.25
FENCE LINE	---	N/A
EDGE OF POND	---	---
WETLAND LINE	---	N/A
STORM MAINHOLE	⊙	⊙
CATCH BASIN	⊞	⊞
CURB INLET	⊞	⊞
STORM PIPE	---	---
SANITARY MAINHOLE	⊙	⊙
CLEANOUT	N/A	○
SANITARY PIPE	---	---
FORCE MAIN PIPE	N/A	---
WATER PIPE	---	---
FIRE HYDRANT	⊞	⊞
OVERHEAD ELECTRIC	---	N/A
UTILITY POLE	⊞	N/A
DECIDUOUS TREE	⊞	N/A
CONIFEROUS TREE	⊞	N/A
TREE LINE	---	---
PAVEMENT HATCH	▨	▨
CONCRETE HATCH	▨	▨
BUILDING OUTLINE	---	---
SIDEWALK	---	---
SIDEWALK HATCH	▨	▨
ROAD CENTERLINE	---	---
EDGE OF CONCRETE	---	---
EDGE OF PAVEMENT	---	---
EDGE OF GRAVEL	---	N/A
PAINT STRIPE	---	---
CURB	---	---
PHASE LIMIT LINE	N/A	---
DUMPSTER PAD	N/A	⊞

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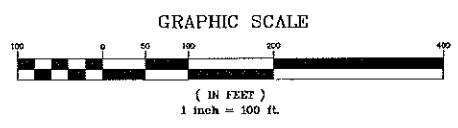


NO.	DATE	DESCRIPTION
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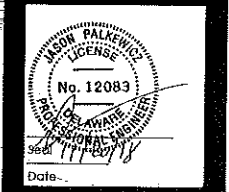
COVER SHEET
for
BAYWOOD GARDEN VILLAS
PHASE 1
SUSSEX COUNTY, DELAWARE
PREPARED FOR: TUNNEL COMPANIES, LLC

Date:	10-24-2017
Job Number:	10005
Scale:	AS NOTED
Drawn By:	ML
Designed By:	IHB
Approved By:	J.P.

Sheet No.: 1
File Name: 10005-prelim-cover



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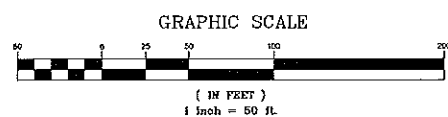
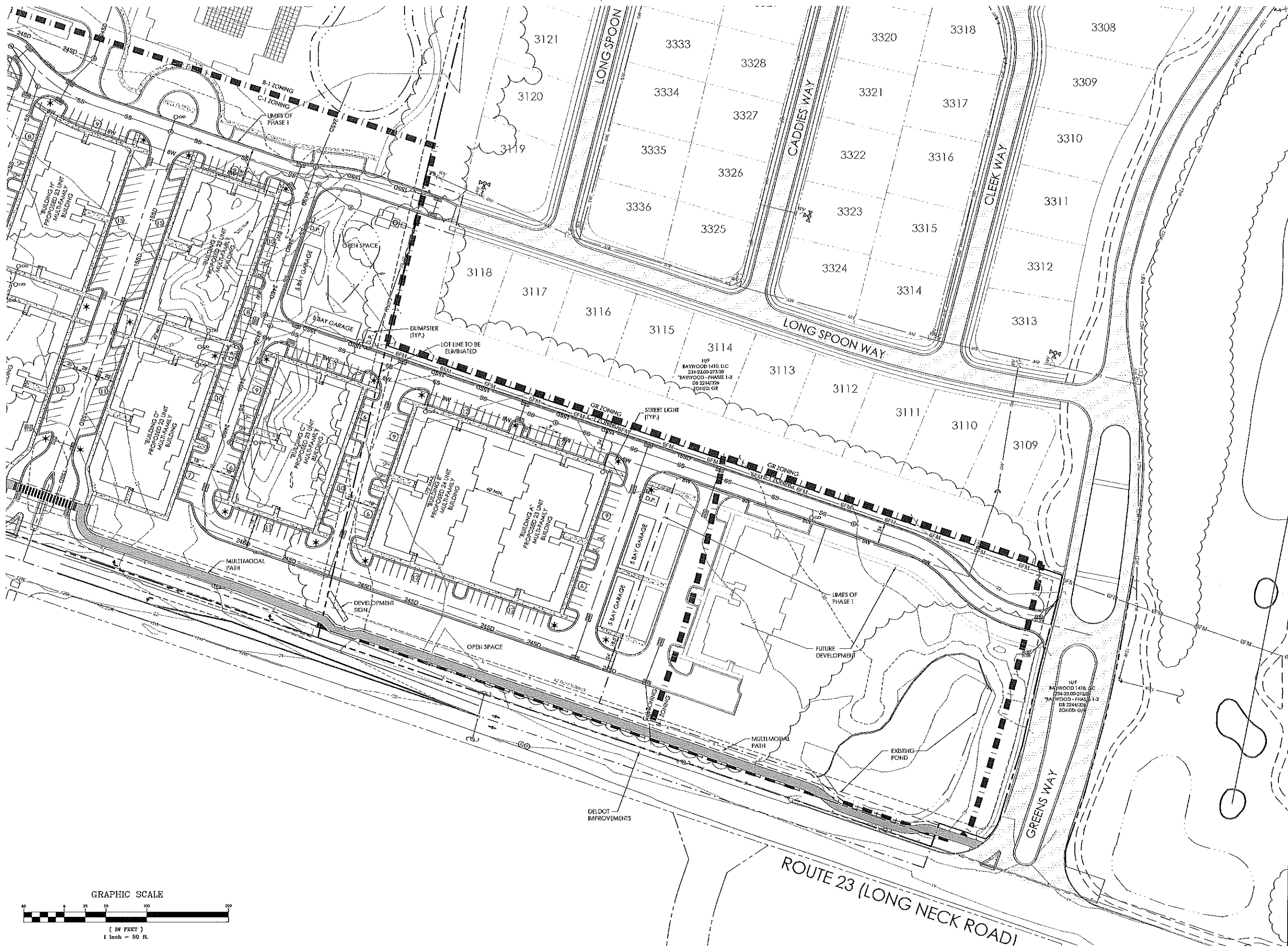
REVISIONS		DESCRIPTION
NO.	DATE	REVISIONS PER AGENCY COMMENTS
1	11/20/18	

EXISTING CONDITIONS PLAN
 for
BAYWOOD GARDEN VILLAS
 PHASE 1
 SUSSEX COUNTY, DELAWARE
 PREPARED FOR: TUNNEL COMPANIES, LLC

Date:	10-24-2017	Drawn By:	MA	Checked By:	HJB	Approved By:	JP
Job Number:	10005	Scale:	1"=100'				

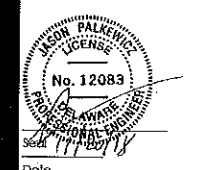
Sheet No.: **2**

File Name: 10005-prelim-excond



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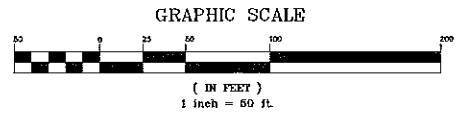
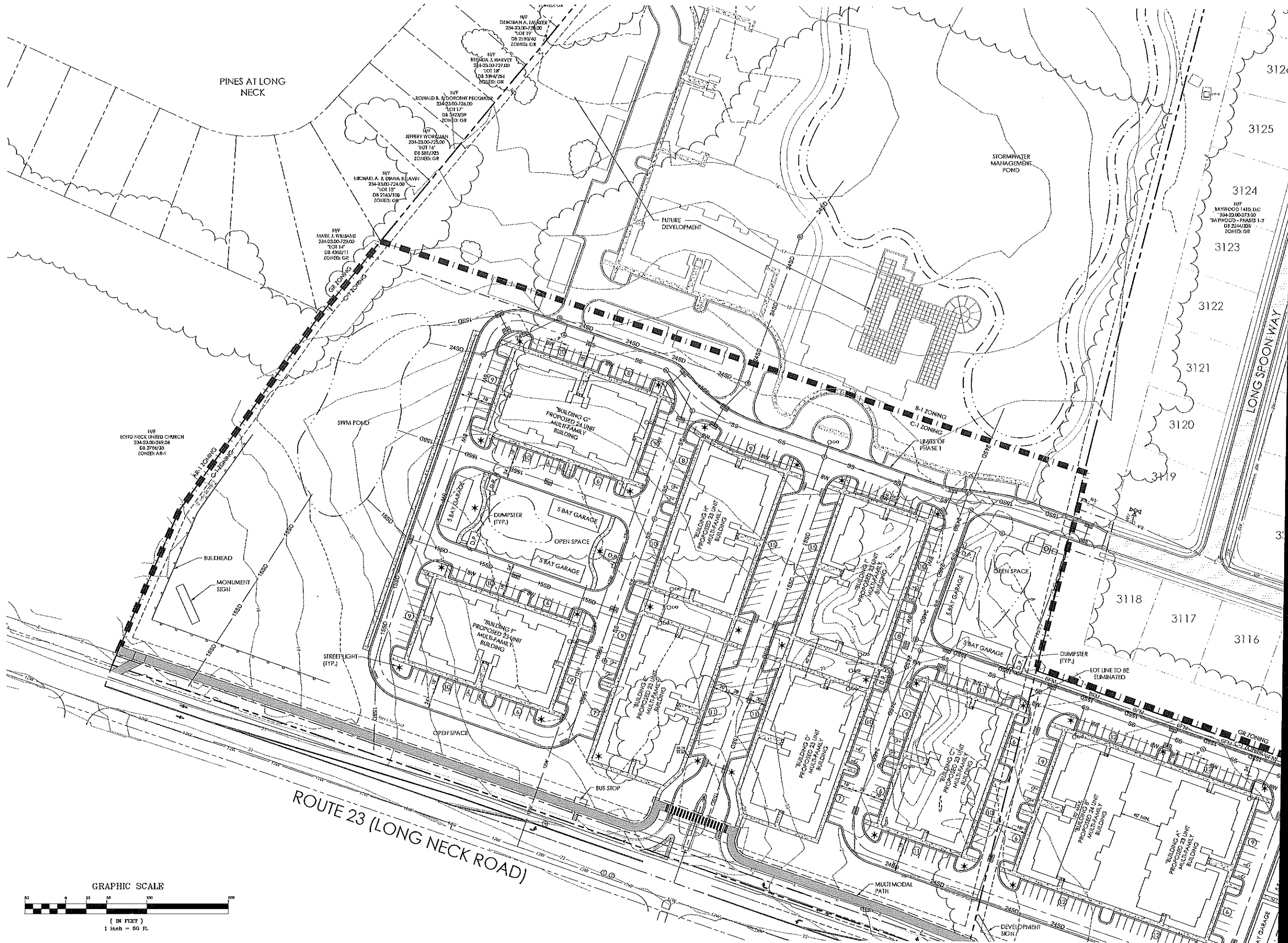


NO.	DATE	DESCRIPTION
1	11/20/18	REVISIONS PER AGENCY COMMENTS

SITE PLAN A
for
BAYWOOD GARDEN VILLAS
PHASE 1
SUSSEX COUNTY, DELAWARE
PREPARED FOR: TUNNEL COMPANIES, LLC

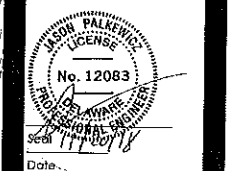
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Job Number:	10005
Scale:	1"=50'
Drawn by:	ML
Designed by:	HJB
Approved by:	JF

Sheet No.: **3**
File Name: 10005-prelim-siteplan



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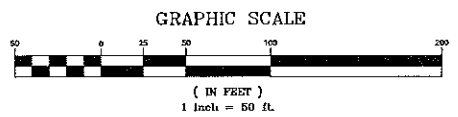
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NO.	DATE	DESCRIPTION	REVISIONS PER AGENCY COMMENTS
1	11/20/18		

SITE PLAN B
for
BAYWOOD GARDEN VILLAS
PHASE 1
SUSSEX COUNTY, DELAWARE
PREPARED FOR: TUNNEL COMPANIES, LLC

Date: 10-24-2017
Job Number: 10005
Scale: 1"=50'
Drawn By: JML
Designed By: HHS
Approved By: JP
Sheet No.: 4
File Name: 10005-prelim-siteplan



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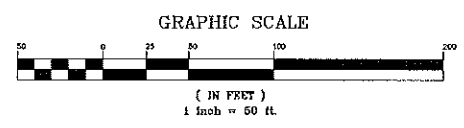
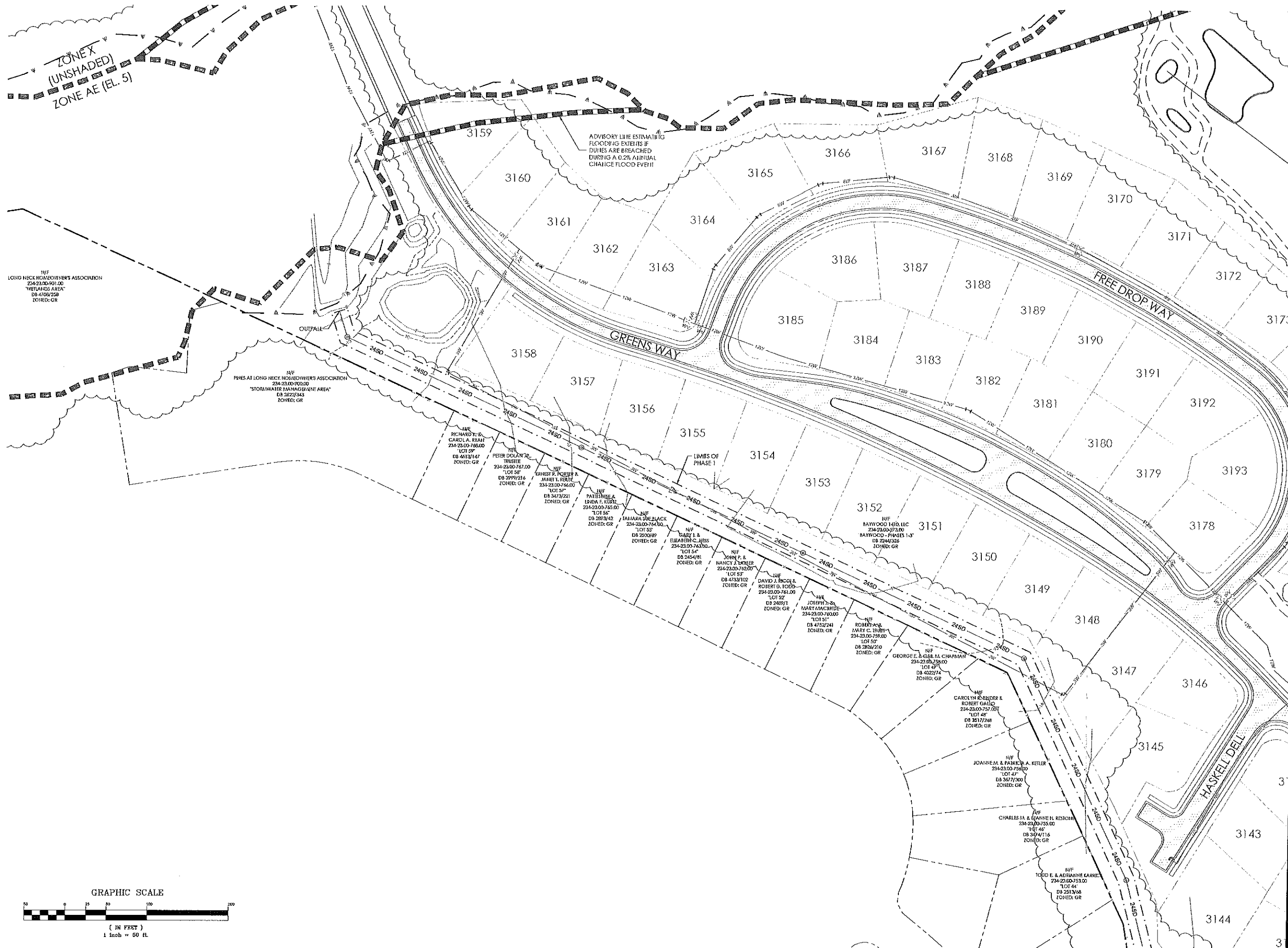
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PROFESSIONAL ENGINEERING
LICENSE
No. 12083
DELAWARE
SUSSEX COUNTY, DELAWARE
Date: 11/20/18

REVISIONS		DESCRIPTION
NO.	DATE	REVISIONS PER AGENCY COMMENTS
1	11/20/18	

SITE PLAN C
for
BAYWOOD GARDEN VILLAS
PHASE 1
SUSSEX COUNTY, DELAWARE
PREPARED FOR: TUNNEL COMPANIES, LLC

Date:	10/24/2017	Job Number:	10005	Scale:	1"=50'	Drawn By:	JL	Designed By:	HRB	Approved By:	JP
Sheet No.:	5										
File Name:	10005-prelim-siteplan										

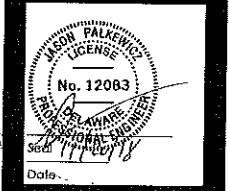


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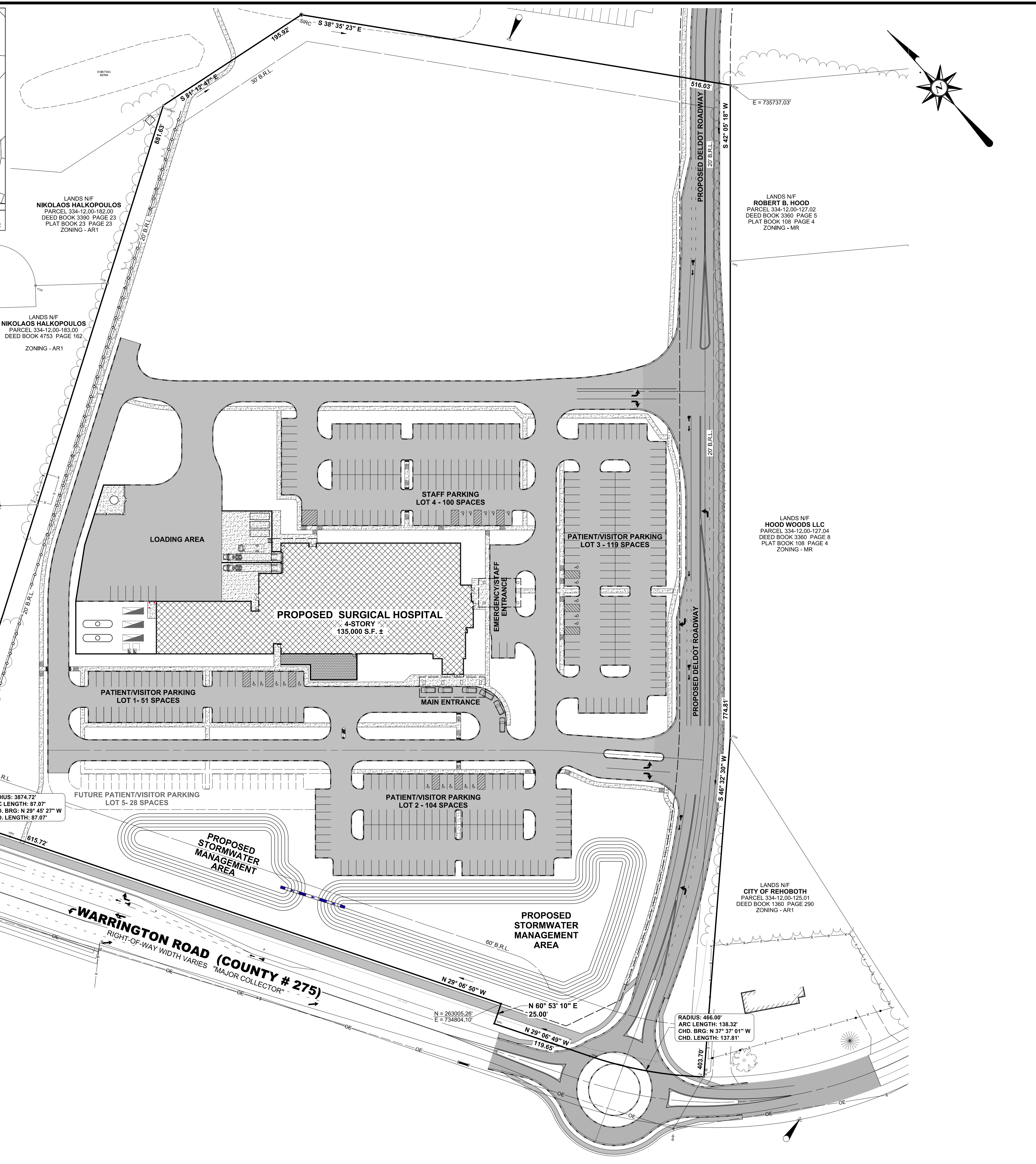
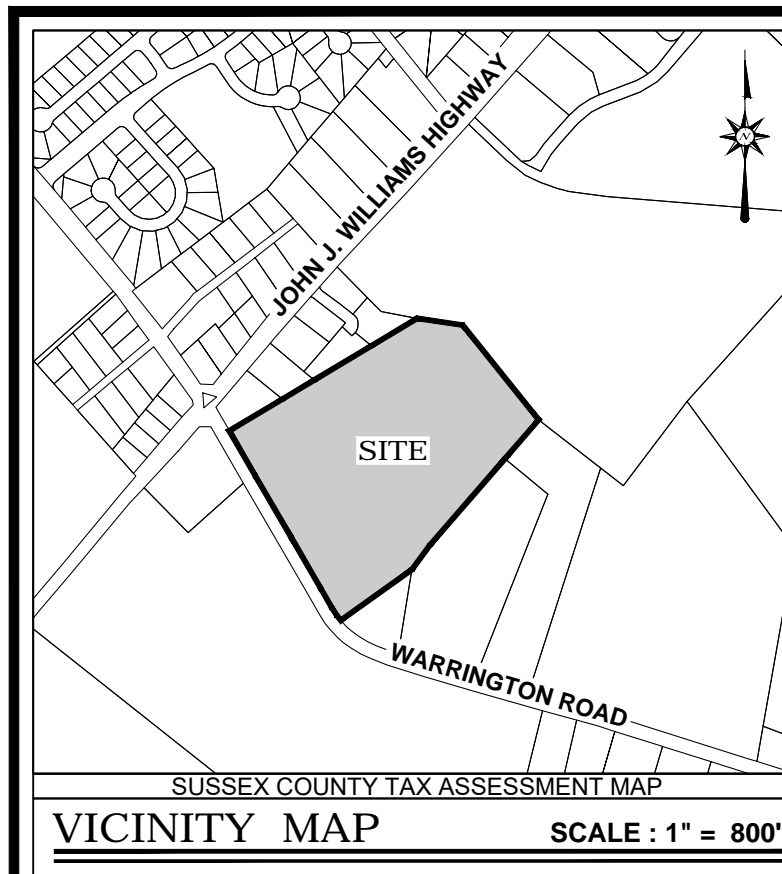
NO.	DATE	DESCRIPTION
1	11/20/18	REVISIONS PER AGENCY COMMENTS

SITE PLAN D
for
BAYWOOD GARDEN VILLAS
PHASE 1
SUSSEX COUNTY, DELAWARE
PREPARED FOR: TUNNEL COMPANIES, LLC

Date:	10-24-2017
Job Number:	10005
Scale:	1"=50'
Drawn By:	JML
Designed By:	HHB
Approved By:	JP

Sheet No.: 6

File Name: 10005-prelim-siteplan



SITE DATA	
1. OWNER OF RECORD:	BEEBE MEDICAL CENTER, INC 431 SAVANNAH ROAD LEWES, DE 19958
2. PROPERTY ADDRESS:	WARRINGTON ROAD LEWES, DE 19958
3. ENGINEER / SURVEYOR:	BECKER MORGAN GROUP INC. 309 SOUTH GOVERNORS AVE. DOVER, DELAWARE 19904 302-734-7950
4. PROPERTY LOCATION:	LATITUDE: N38° 43' 24.33" GR80 - NAD83 (2011) LONGITUDE: W75° 08' 24.01" GR80 - NAD83 (2011)
5. PROPERTY MAP NUMBER:	334-12.00-125.00
6. DEED REFERENCE:	3535-251
7. RIGHT-OF-WAY CONVEYED:	DEED BOOK 4660 PAGE 303 (CONTRACT T200411209)
8. SITE AREA SUMMARY:	19.9136 ACRES ± (867,436 S.F.)
9. ZONING CLASSIFICATION:	I-1 - INSTITUTIONAL
10. SETBACKS:	I-1 - INSTITUTIONAL FRONT YARD: 60 FEET SIDE YARD: 10 FEET (20' ADJACENT TO RESIDENTIAL) REAR YARD: 10 FEET (20' ADJACENT TO RESIDENTIAL)
11. PRESENT USE:	CULTIVATED FARM FIELD
12. PROPOSED USE:	HOSPITAL
13. BUILDING:	EXISTING BUILDINGS: 0 S.F. PR. BUILDING AREA: 135,000 S.F. TOTAL AT COMPLETION: 135,000 S.F. PROPOSED HEIGHT: 95' (60 FT. MAX. ALLOWED, 35' VARIANCE REQUESTED TO ALLOW MAX. HEIGHT OF 95') NUMBER OF STORIES: 4 (PLUS BASEMENT) CONSTRUCTION TYPE: TYPE I-B (NFPA CONSTRUCTION TYPE)
14. PARKING:	HOSPITAL 1.0 SPACES PER 3 BEDS + PLUS 1.0 SPACE PER EA. MEDICAL STAFF MEMBER + 1 PER EACH 2 EMPLOYEES ON LARGEST SHIFT 70 BEDS = 70 / 3 = 23.3 = 24 SPACES 120 MEDICAL STAFF MEMBERS = 120 x 1 = 120 SPACES 200 EMPLOYEES ON LARGEST SHIFT / 2 = 100 SPACES TOTAL REQUIRED = 24 + 120 + 100 = 244 SPACES TOTAL H.C. REQUIRED = LOT 1 - (2) + LOT 2 - (5), LOT 3 - (5), LOT 4 - (5) = 17 TOTAL H.C. PROVIDED = LOT 1 - (8) + LOT 2 - (5), LOT 3 - (5), LOT 4 - (5) = 20 TOTAL PROVIDED = 374 SPACES (INCLUDES 20 H.C.) SURPLUS = 130 SPACES SHOWN AS FUTURE = 28 SPACES (NOT INCLUDED ABOVE)
15. LOADING:	HOSPITAL REQUIRED: 100,000 S.F. - 200,000 S.F. OF BUILDING AREA = 3 PROVIDED: 3
16. UTILITIES:	SOURCE OF SEWER: SUSSEX COUNTY SOURCE OF WATER: TIDEWATER UTILITIES SOURCE OF NATURAL GAS: CHESAPEAKE UTILITIES SOURCE OF ELECTRIC: DELAWARE ELECTRIC CO-OP
17. NET DEVELOPMENT AREA: (LIMIT OF DISTURBANCE)	678,804 S.F. (15.5832 AC.)
18. IMPERVIOUS AREA:	381,862 S.F. (8.7683 AC.)
19. ROAD CLASSIFICATION:	MAJOR COLLECTOR - WARRINGTON ROAD (45 M.P.H.)
20. SURVEY DATUM:	VERTICAL: NAVD 88 - FLOOD 4 HORIZONTAL: NAD 83 (2011) DSP - CORS
21. MONUMENTATION:	5 FOUND 6 SET
22. SURVEY CLASSIFICATION:	SUBURBAN SURVEY
23. SURVEY UNIT:	LINEAR: US SURVEY FOOT ANGULAR: DEGREES MINUTES SECONDS (DMS) COORDINATE: GROUND

GENERAL NOTES :

- TOPOGRAPHIC AND BOUNDARY RETRACEMENT SURVEY WAS PREPARED BY BECKER MORGAN GROUP, DOVER, DE., IN SEPTEMBER OF 2017.
- THE BOUNDARY LINES PORTRAYED HEREON HAVE BEEN ESTABLISHED BASED SOLELY ON PHYSICAL EVIDENCE DISCOVERED IN THE FIELD IN CONJUNCTION WITH DETERMINATIONS DERIVED FROM SOURCE OF TITLE AND ADJACENT DEED RECORD INFORMATION.
- PROPERTY SHOWN HEREON IS SUBJECT TO ANY RIGHT-OF-WAY, EASEMENTS, RESTRICTIONS, ETC. AS MAY BE SHOWN OR NOTED IN ANY RECORD, PUBLIC OR OTHERWISE, OR ANY REQUIREMENT OR REGULATION OF ANY PUBLIC AGENCY.
- ALL MEASUREMENTS MADE ARE BASED ON A GNSS RTK SITE CALIBRATION SET BY BECKER MORGAN GROUP, DOVER, DE., IN SEPTEMBER OF 2014. BOTH VERTICAL AND HORIZONTAL COORDINATES FOR SITE CALIBRATION WERE DERIVED THROUGH A LIMITED CONSTRAINT POST PROCESS OF STATIC GNSS OBSERVATIONS. VERTICAL DATUM IS BASED ON NGS MONUMENT FLOOD 4 (NAVD 88) WITH TIES TO OTHER NEAR BY PASSIVE NGS MONUMENTS. HORIZONTAL DATUM IS BASED ON ACTIVE NGS MONUMENTS - DELAWARE: STATE PLANE NAD 83 (2011).
- WHERE GNSS OBSERVATION WERE NOT SUITABLE, MEASUREMENTS WERE MADE WITH A TOPCON OS-3A ELECTRONIC TOTAL STATION. TRAVERSE RAN TO/FROM POINTS SET WITHIN CALIBRATION FILE WERE WITHIN MINIMUM CLOSURE STANDARD SET BY STATE STATUTE FOR AN URBAN SURVEY BEFORE ADJUSTMENT.
- PARCEL IS NOT LOCATED WITHIN THE ONE HUNDRED YEAR FLOOD PLAIN ZONE, BASED ON FIRM MAP 10005C0332K, PANEL 332 OF 660, DATED MARCH 16, 2015.
- ALL UNDERGROUND UTILITIES SHOWN HEREON ARE DEPICTED BASED ON EVIDENCE COLLECTED FROM TOPOGRAPHIC SURVEY AND PLANS FROM PAST SITE IMPROVEMENTS. THIS PLAN SHOULD BE CONSIDERED A QUALITY LEVEL D ACCURACY DEFINED BY FHWA - SUBSURFACE UTILITY ENGINEERING.
- A WETLAND/WATERS IDENTIFICATION AND DELINEATION REPORT WAS PREPARED FOR THE SITE ON JULY 17, 2017 BY WATERSHED ECO, L.L.C. THE REPORT INDICATES THAT NO WATERS OR WETLANDS WERE IDENTIFIED IN THE STUDY AREA AS DESCRIBED IN THE REPORT.
- PARKING SHOWN ON THIS PLAN EXCEEDS THE TOTAL PARKING REQUIRED FOR THE PROJECT. SOME OF THE PARKING MAY BE PHASED AND INSTALLED AS IT BECOMES NECESSARY.

OWNERS CERTIFICATION	
WE, BEEBE MEDICAL CENTER, INC, HEREBY CERTIFY THAT WE ARE THE OWNER OF THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN, THAT THE PLAN WAS MADE AT OUR DIRECTION, AND THAT WE ACKNOWLEDGE THE SAME TO BE OUR ACT AND DESIRE THE PLAN TO BE DEVELOPED AS SHOWN IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS.	
SIGNATURE _____	DATE _____
ENGINEERS CERTIFICATION	
I, J. MICHAEL RIEMANN, HEREBY CERTIFY THAT I AM A REGISTERED ENGINEER IN THE STATE OF DELAWARE, THAT THE INFORMATION SHOWN HEREON HAS BEEN PREPARED UNDER MY SUPERVISION AND TO MY BEST KNOWLEDGE AND BELIEF REPRESENTS GOOD ENGINEERING PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.	
J. MICHAEL RIEMANN _____	P.E. NO. 13772 DATE _____

BECKER MORGAN GROUP

ARCHITECTURE
ENGINEERING

Dover, DE
309 S. Governors Ave.
Dover, DE 19904
Ph. 302.734.7950
Fax 302.734.7965

Salisbury, MD
312 West Main St. Suite 300
Salisbury, MD 21801
Ph. 410.546.9100
Fax 410.546.5824

Wilmington, NC
3333 Jaeckle Drive, Suite 120
Wilmington, North Carolina 28403
Ph. 910.341.7600
Fax 910.341.7506

www.beckermorgan.com

PROJECT TITLE

BEEBE HEALTHCARE REHOBOTH CAMPUS

WARRINGTON RD.
LEWES & REHOBOTH HUNDRED
SUSSEX COUNTY, DELAWARE

SHEET TITLE

OVERALL SITE PLAN

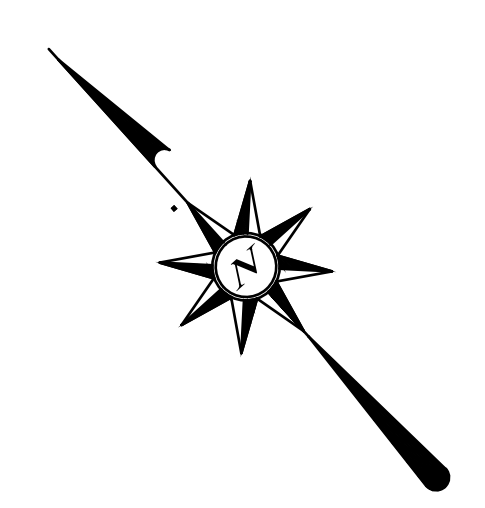
0 30 60 120

SCALE : 1" = 60'

ISSUE BLOCK		
MARK	DATE	DESCRIPTION
LAYER:STATE: C-001		
PROJECT NO.:	2017147.01	
DATE:	1-14-19	
SCALE:	1" = 60'	
DRAWN BY:	M.J.H.	PROJ. MGR.: J.M.R.
SHEET		
C-001		
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JOHN T. HOOD



BECKER MORGAN GROUP

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ENGINEERING

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3333 Jacekle Drive, Suite 120
Wilmington, North Carolina 28403
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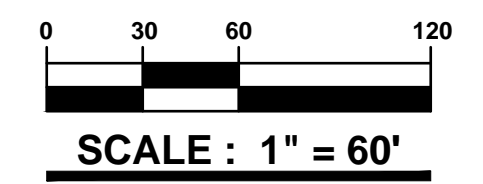
PROJECT TITLE

BEEBE HEALTHCARE REHOBOTH CAMPUS

WARRINGTON RD.
LEWES & REHOBOTH HUNDRED
SUSSEX COUNTY, DELAWARE

SHEET TITLE

OVERALL SITE PLAN



MARK	DATE	DESCRIPTION

PROJECT NO.: **2017147.01**

DATE: **1-14-19**

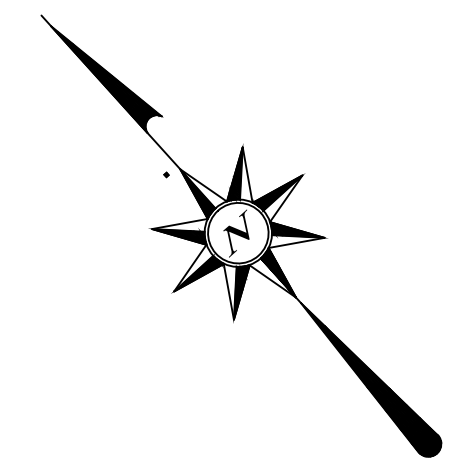
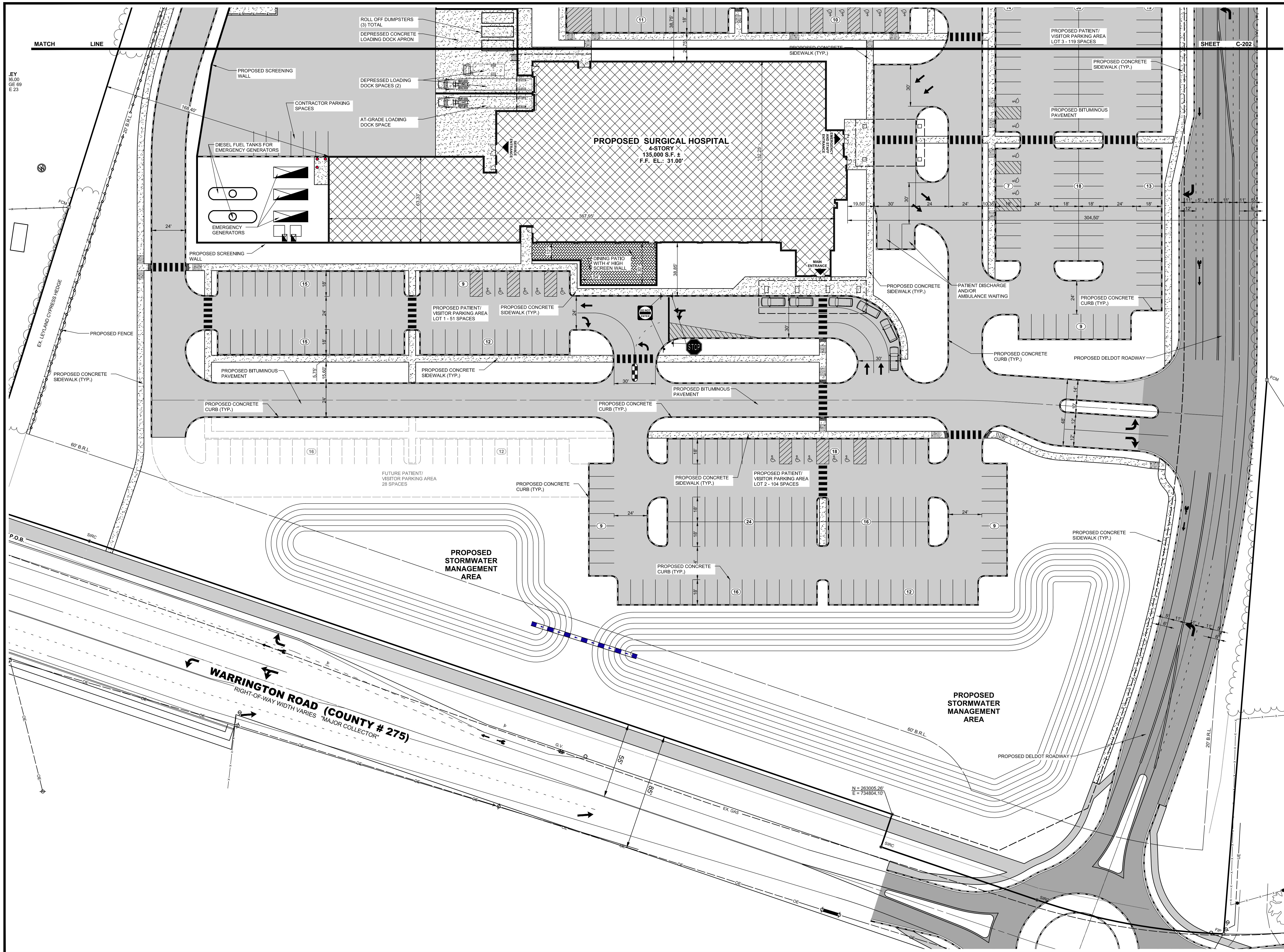
SCALE: **1" = 60'**

DRAWN BY: **M.J.H.** | PROJ. MGR.: **J.M.R.**

SHEET

C-002

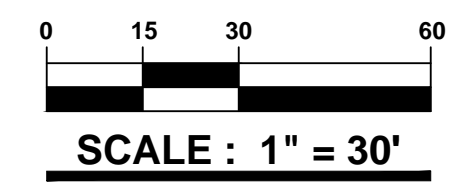
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PROJECT TITLE
BEEBE HEALTHCARE REHOBOTH CAMPUS

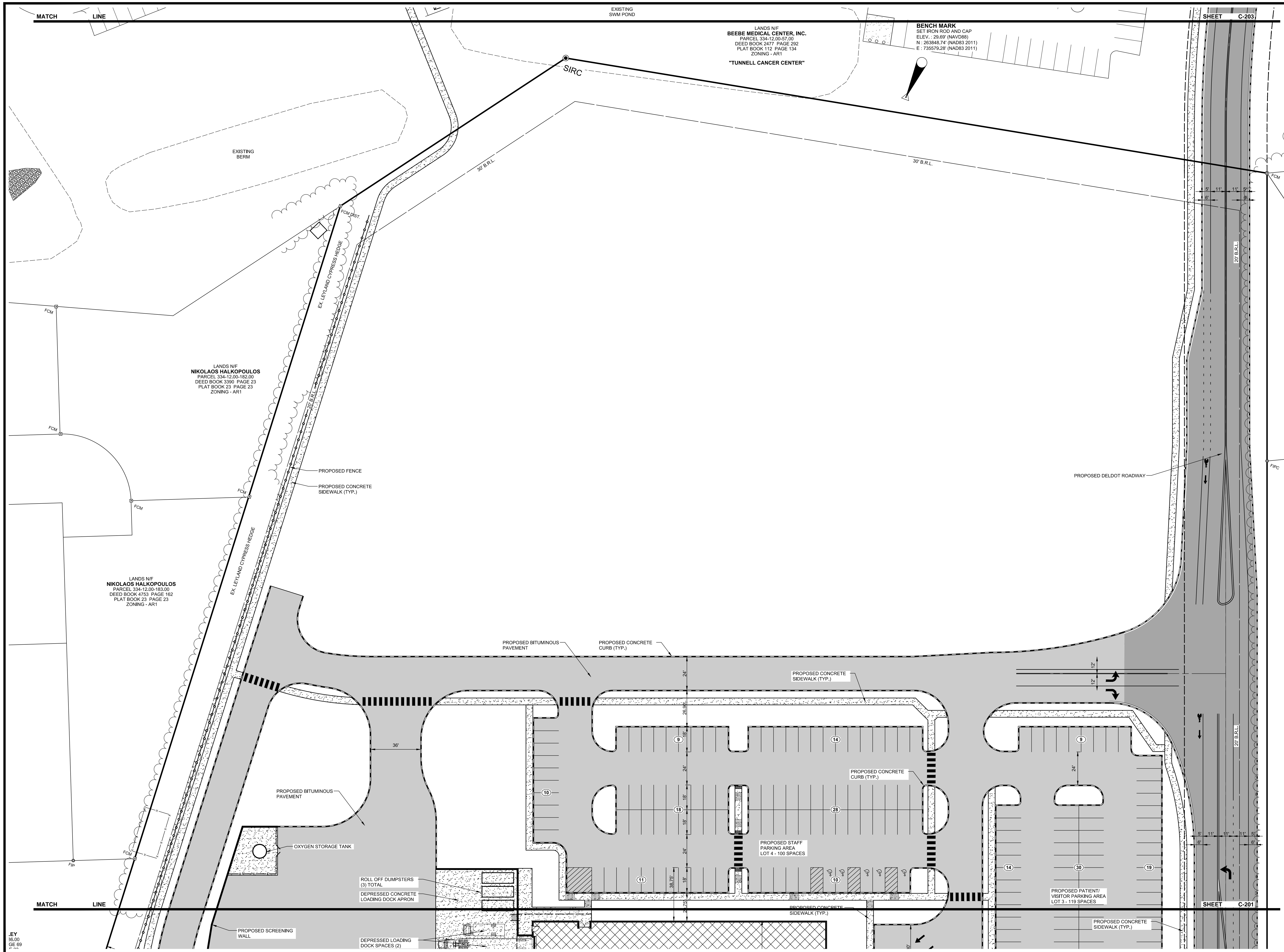
WARRINGTON RD.
LEWES & REHOBOTH HUNDRED
SUSSEX COUNTY, DELAWARE

SHEET TITLE
SITE PLAN



MARK	DATE	DESCRIPTION
LAYER STATE	C-201	
PROJECT NO.:	2017147.01	
DATE:	1-14-19	
SCALE:	1" = 30'	
DRAWN BY:	M.J.H.	PROJ. MGR.: J.M.R.
SHEET		

C-201
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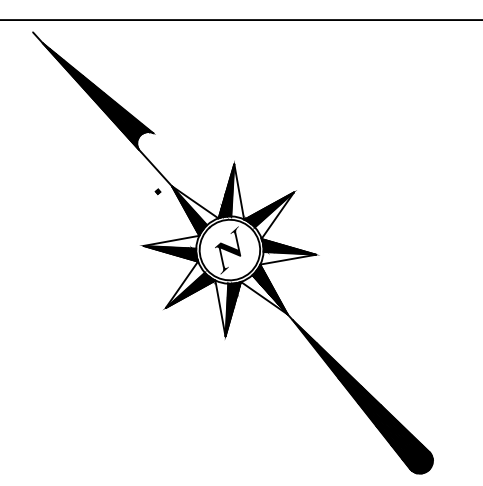
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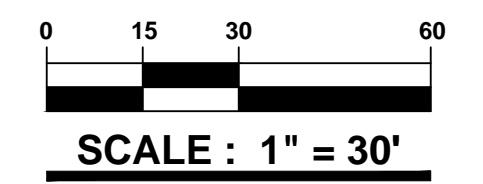
PROJECT TITLE

BEEBE HEALTHCARE REHOBOTH CAMPUS

WARRINGTON RD.
LEWES & REHOBOTH HUNDRED
SUSSEX COUNTY, DELAWARE

SHEET TITLE

SITE PLAN

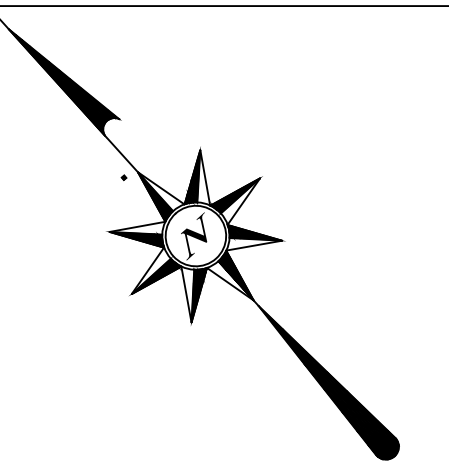


MARK	DATE	DESCRIPTION
LAYER STATE: C-202		
PROJECT NO.:	2017147.01	
DATE:	1-14-19	
SCALE:	1" = 30'	
DRAWN BY:	M.J.H.	PROJ. MGR.: J.M.R.
SHEET		
C-202		
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SHEET C-203

SHEET C-201

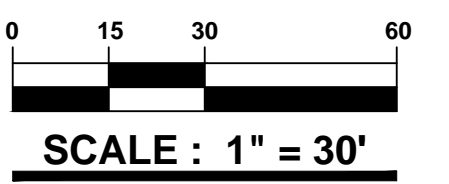
EY
36.00
GE 69



PROJECT TITLE
**BEEBE
HEALTHCARE
REHOBOTH
CAMPUS**

WARRINGTON RD.
LEWES & REHOBOTH HUNDRED
SUSSEX COUNTY, DELAWARE

SHEET TITLE
SITE PLAN

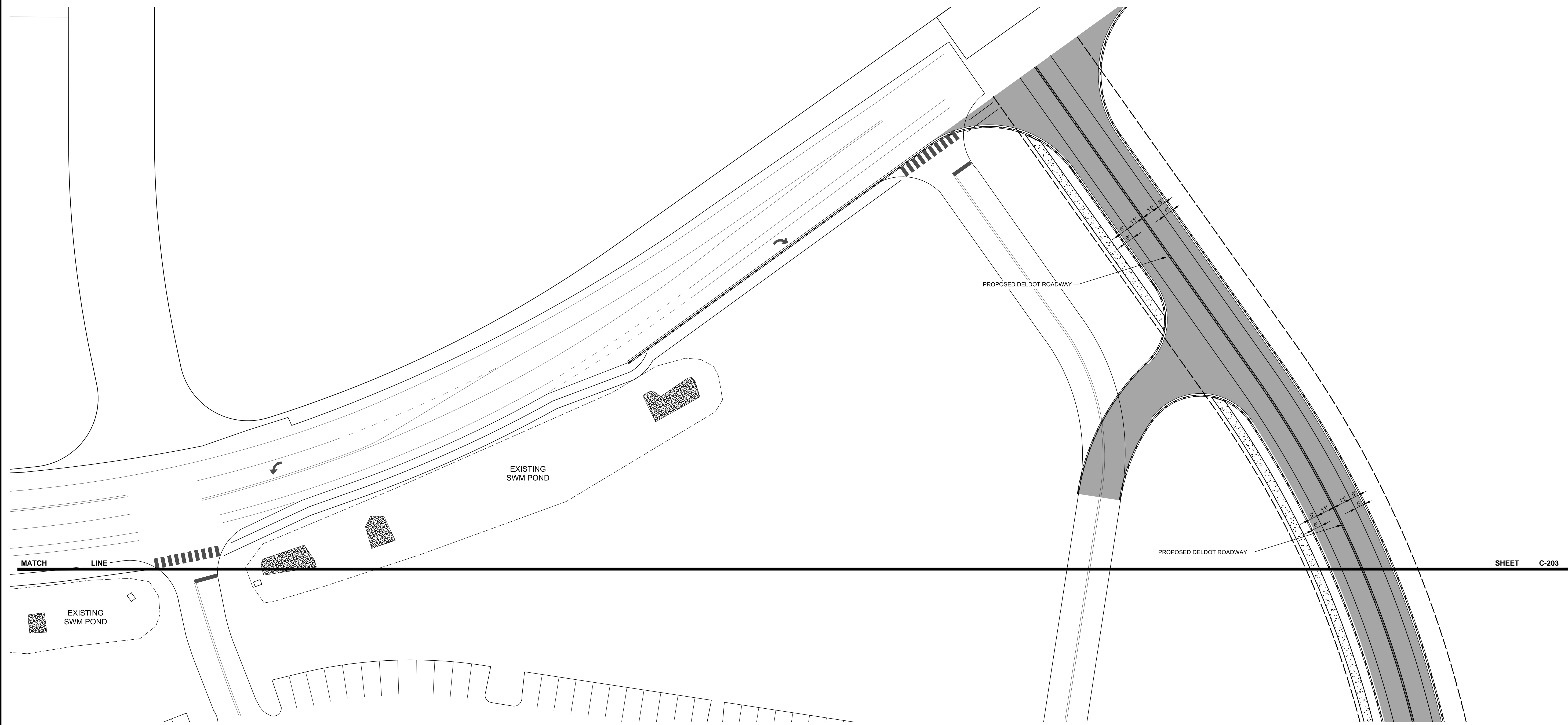


ISSUE BLOCK

MARK	DATE	DESCRIPTION

PROJECT NO.: **2017147.01**
DATE: **1-14-19**
SCALE: **1" = 30'**
DRAWN BY: **M.J.H.** | PROJ. MGR.: **J.M.R.**
SHEET
C-203
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F:\AutoCAD\Projects\2017\2017147\01\DWG\201714701-SITE-C3018.dwg, Jan 14, 2019 - 8:36am



SHEET C-203

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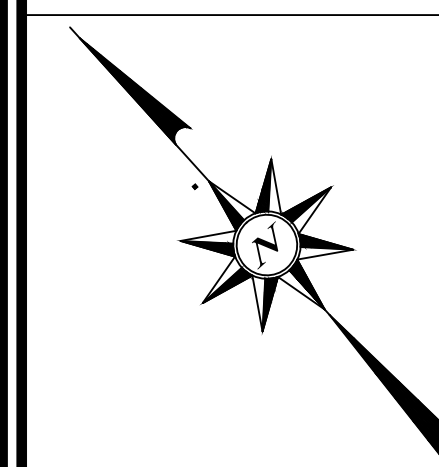
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PROJECT TITLE

**BEEBE
HEALTHCARE
REHOBOTH
CAMPUS**

**WARRINGTON RD.
LEWES & REHOBOTH HUNDRED
SUSSEX COUNTY, DELAWARE**

SHEET TITLE

SITE PLAN



SCALE: 1" = 30'

ISSUE BLOCK

MARK	DATE	DESCRIPTION

MARK	DATE	DESCRIPTION
LAYER STATE: C-203		
PROJECT NO.:	2017147.01	
DATE:	1-14-19	
SCALE:	1" = 30'	
DRAWN BY:	M.J.H.	PROJ. MGR.: J.M.R.

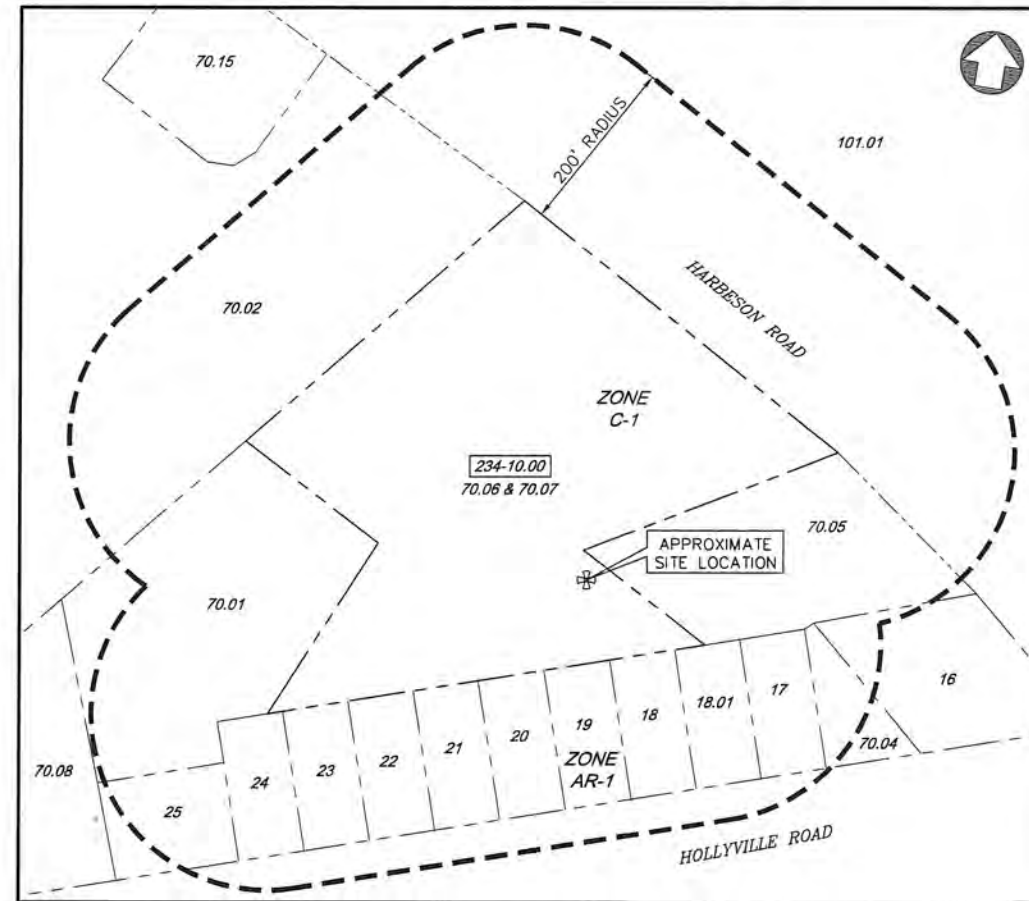
SHEET
C-204
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CELLCO PARTNERSHIP d/b/a VERIZON WIRELESS WIRELESS COMMUNICATION FACILITY

DOV HOLLYVILLE
22602 HARBESON ROAD
HARBESON, DE 19951
234-10.00-70.06 / 234-10.00-70.07



LOCATION MAP
N.T.S.



KEY MAP
SCALE: 1" = 200'

SITE DATA	
NAD 83	
*LATITUDE = N 38° 40' 25.5"	
*LONGITUDE = W 75° 14' 13.8"	
ELEVATION DATA (NAVD 88)	
*GRADE = ±30.2' (AMSL)	
*FAA 2C CERTIFIED	
ANTENNAS AT CENTERLINE (NAVD 88)	
ALPHA = ±145'-0" (AGL)	
BETA = ±145'-0" (AGL)	
GAMMA = ±145'-0" (AGL)	
PROJECT DATA	
PROJECT:	DOV HOLLYVILLE
LOCATION:	22602 HARBESON ROAD HARBESON, DE 19951
BLOCK & LOT:	234-10.00-70.06 / 234-10.00-70.07
ZONE:	C-1
PROPERTY OWNER:	JOHN W. DAVIDSON TRUSTEE 22602 HARBESON ROAD HARBESON, DE 19951
APPLICANT:	CELLCO PARTNERSHIP d/b/a VERIZON WIRELESS 512 EAST TOWNSHIP LINE ROAD BLUE BELL, PA. 19422

DRAWING SCHEDULE	
DWG #	DRAWING TITLE
C-01	COVER SHEET
SP-1	SITE MAP AND NOTES
SP-2	COMPOUND PLAN AND ELEVATION
SP-3	ANTENNA AND SITE DETAILS

SCHEDULE OF REVISIONS					
NO.	DESCRIPTION OF CHANGES	DRAWN BY	AUTH. BY	ISSUE STATUS	ISSUE DATE
7					
6					
5					
4	SUSSEX COUNTY PLANNING & ZONING REVIEW LTR. 01/07/2019	J.L.	P.J.T.	C	01/09/19
3	ISSUED FOR CONSTRUCTION PERMITS	J.L.	P.J.T.	C	12/05/18
2	REVISED PER COMMENTS	A.R.C.	P.J.T.	B	06/04/18
1	COMMENTS INCORPORATED	J.L.	P.J.T.	A	05/23/18
0	ISSUED FOR REVIEW	J.L.	P.J.T.	A	05/16/18

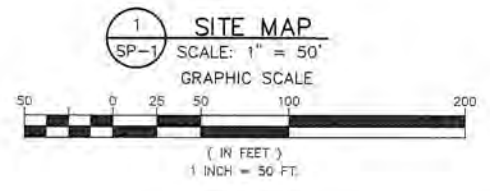
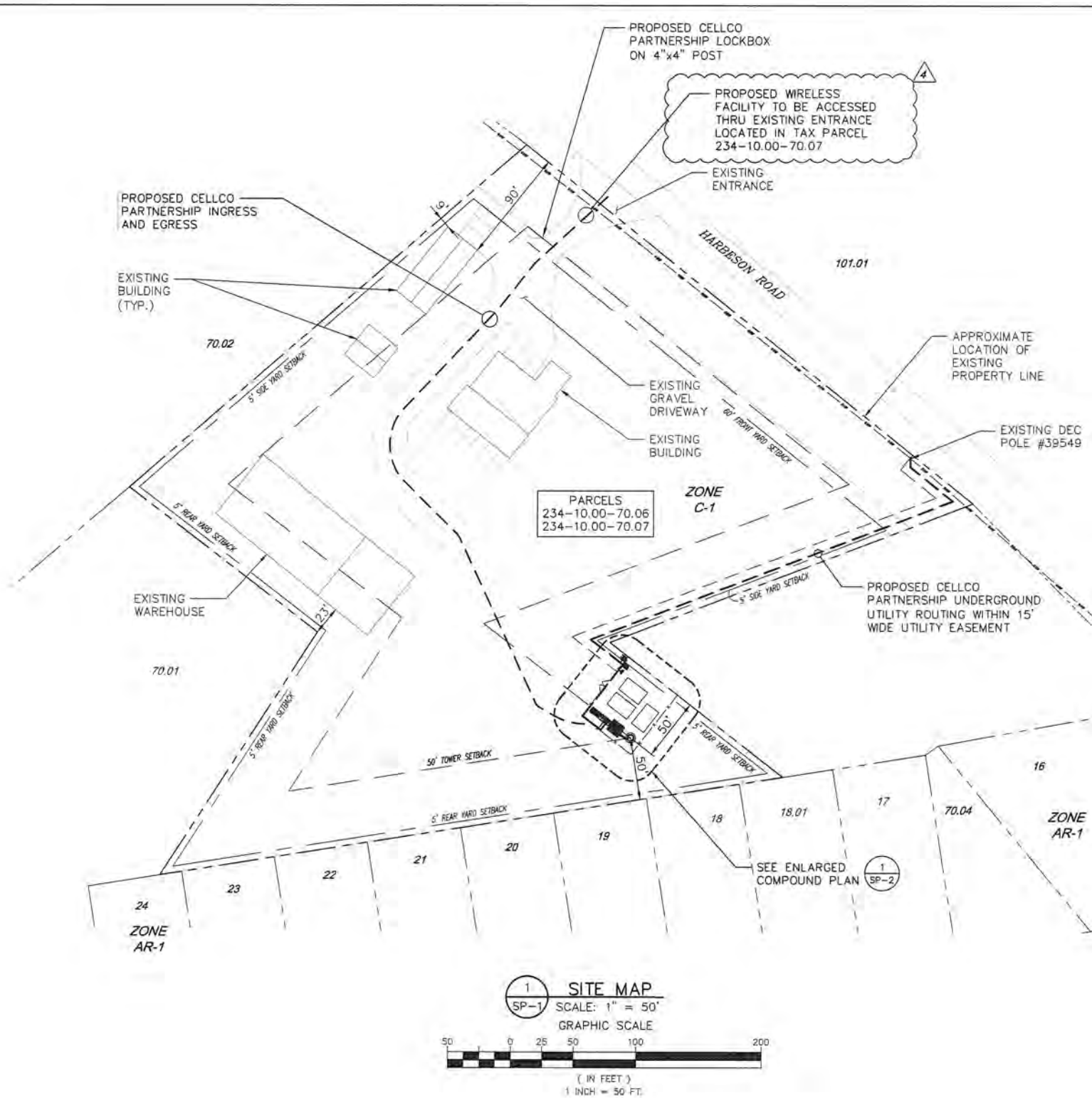
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CELLCO PARTNERSHIP d/b/a
VERIZON WIRELESS
512 E. TOWNSHIP LINE ROAD, BUILDING 2, FLOOR 3
BLUE BELL, PA. 19422
TEL: (610) 715-6000

JOHN BOSCO
DELAWARE PROFESSIONAL ENGINEER
DATE: 1/9/19

DRAWING TITLE:	COVER SHEET	
PROJECT:	DOV HOLLYVILLE 22602 HARBESON ROAD HARBESON, DE 19951 SUSSEX COUNTY	
PROPERTY OWNER:	JOHN W. DAVIDSON TRUSTEE	

DRAWING ISSUE STATUS CURRENTLY - C	
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B - ISSUED FOR MUNICIPAL REVIEWS/APPROVALS	
C - ISSUED FOR CONSTRUCTION PERMITS/BIDS	
D - ISSUED FOR CONSTRUCTION	
E - (SPECIFY)	
FIRST ISSUE: 05/16/18	DRAWING NO: C-01
DRAWN BY: J.L.	
CHECKED BY: P.J.T.	
SCALE: AS SHOWN	SHEET NO. 1 OF 4
PROJECT NO. 124.112	PRINT DATE: 12/05/18
DOCUMENT NO.	



GENERAL NOTES:

- SUBJECT PROPERTY IS KNOWN AS 234-10.00-70.06 / 234-10.00-70.07 AS SHOWN ON THE SUSSEX COUNTY TAX MAPS AND IS SITUATED AT 22602 HARBESON ROAD IN HARBESON, DE 19951.
- APPLICANT: CELLCO PARTNERSHIP d/b/a VERIZON WIRELESS
512 EAST TOWNSHIP LINE ROAD
BLUE BELL, PA 19422

PROPERTY OWNER: JOHN W. DAVIDSON TRUSTEE
22602 HARBESON ROAD
HARBESON, DE 19951
- THE APPLICANT PROPOSES TO INSTALL A WIRELESS COMMUNICATIONS FACILITY, CONSISTING OF OUTDOOR EQUIPMENT CABINETS, GENERATOR, AND (12) ANTENNAS ATTACHED TO A PROPOSED MONOPOLE WITHIN A NEW 50'x60' FENCED COMPOUND. THE PROPOSED USE IS A MOBILE COMMUNICATIONS TELEPHONE EXCHANGE AND IS NOT INTENDED FOR PERMANENT EMPLOYEE OCCUPANCY. ADDITIONAL SITE PARKING WILL ALSO NOT BE REQUIRED.
- THIS FACILITY SHALL BE VISITED ON THE AVERAGE OF ONCE A MONTH FOR MAINTENANCE AND SHALL BE MONITORED FROM A REMOTE FACILITY.
- FINAL CONNECTIONS TO THE ELECTRICAL AND TELEPHONE UTILITIES TO BE DETERMINED BY THE APPROPRIATE UTILITY COMPANIES. ALL PROPOSED UTILITIES SHALL BE UNDERGROUND.
- SPECIAL USE EXCEPTION GRANTED BY SUSSEX COUNTY BOARD OF ADJUSTMENT CASE NO. 12201, JOHN W. DAVIDSON, TRUSTEE ON NOVEMBER 20, 2018.

SCHEDULE OF BULK REQUIREMENTS			
ZONE C-1 DISTRICT			
REGULATION	REQUIRED	EXISTING	PROPOSED
MINIMUM HEIGHT	42 FT	16 FT	150 FT*
MINIMUM LOT AREA	10,000 SF	202,118 SF ±	NO CHANGE
MINIMUM LOT WIDTH	150 FT	394 FT ±	NO CHANGE
MINIMUM LOT DEPTH	100 FT	407 FT ±	NO CHANGE
MINIMUM FRONT YARD	60 FT	90 FT ±	NO CHANGE
MINIMUM SIDE YARD (EACH)	5 FT	9 FT ±	NO CHANGE
MINIMUM REAR YARD	5 FT	23 FT ±	NO CHANGE

SUPPLEMENTARY REGULATIONS			
§ 115-194.2 - COMMERCIAL COMMUNICATIONS TOWERS AND ANTENNAS			
REGULATION	REQUIRED	EXISTING	PROPOSED
MIN. DISTANCE TO RESIDENTIAL DISTRICT	500 FT	N/A	50 FT*
MINIMUM TOWER SETBACK (1/3 TOWER HEIGHT)	50 FT	N/A	50 FT
MINIMUM FENCE HEIGHT	6 FT	N/A	6 FT

SCHEDULE OF REVISIONS					
NO.	DESCRIPTION OF CHANGES	DRAWN BY	AUTH. BY	ISSUE STATUS	ISSUE DATE
7					
6					
5					
4	SUSSEX COUNTY PLANNING & ZONING REVIEW LTR. 01/07/2018	J.L.	P.J.T.	C	01/09/18
3	ISSUED FOR CONSTRUCTION PERMITS	J.L.	P.J.T.	D	12/05/18
2	REVISED PER COMMENTS	A.R.C.	P.J.T.	B	06/04/18
1	COMMENTS INCORPORATED	J.L.	P.J.T.	A	05/23/18
0	ISSUED FOR REVIEW	J.L.	P.J.T.	A	05/16/18

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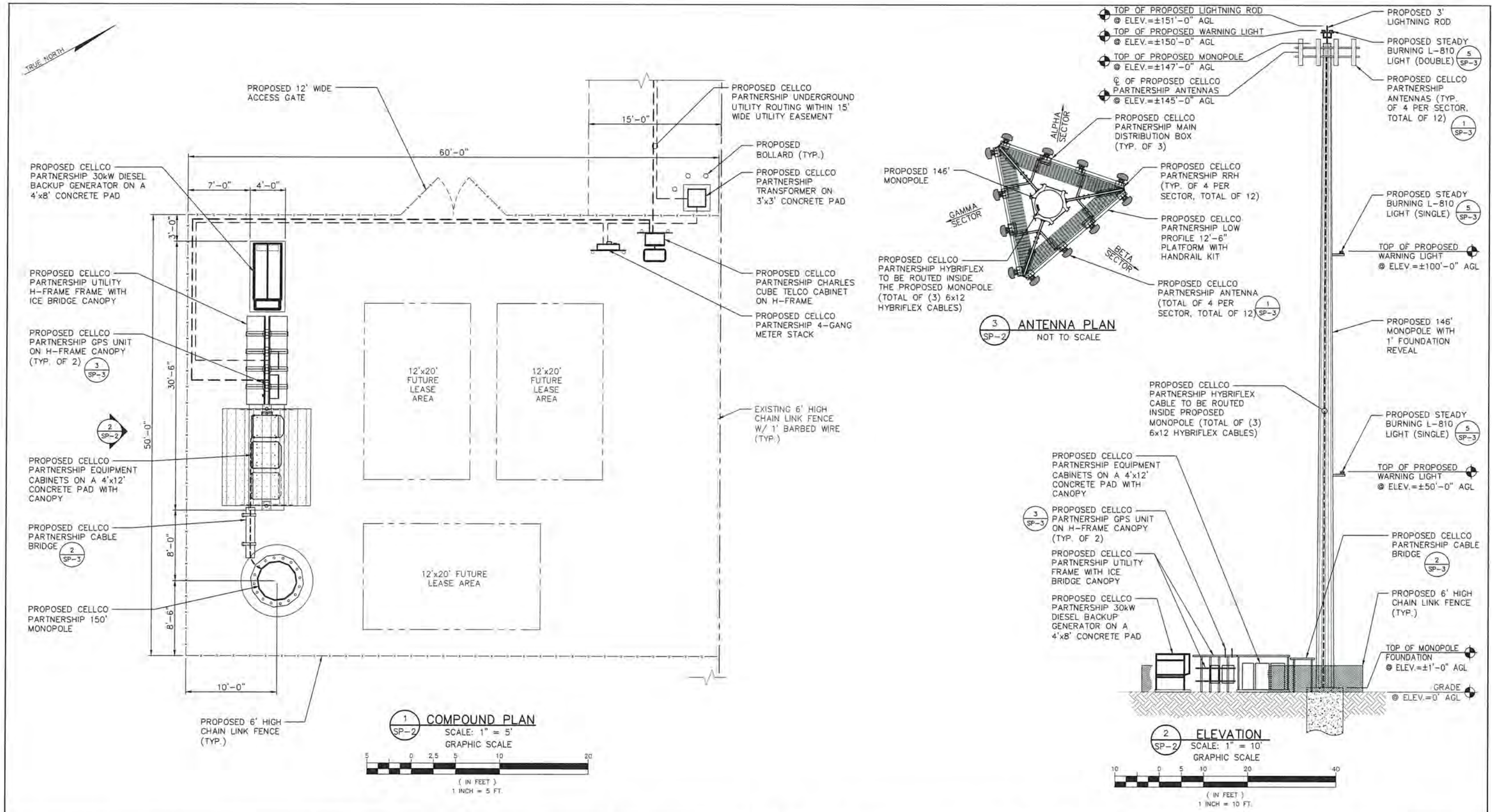
CELLCO PARTNERSHIP d/b/a VERIZON WIRELESS
 512 E. TOWNSHIP LINE ROAD, BUILDING 2, FLOOR 3
 BLUE BELL, PA. 19422
 TEL: (610) 715-6000



DRAWING TITLE: **SITE MAP AND NOTES**
 PROJECT: DOV HOLLYVILLE
 22602 HARBESON ROAD
 HARBESON, DE 19951
 SUSSEX COUNTY
 PROPERTY OWNER: JOHN W. DAVIDSON TRUSTEE

DRAWING ISSUE STATUS CURRENTLY - **C**
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 C - ISSUED FOR CONSTRUCTION PERMITS/BIDS
 D - ISSUED FOR CONSTRUCTION
 E - (SPECIFY)
 FIRST ISSUE: 05/16/18
 DRAWN BY: J.L.
 CHECKED BY: P.J.T.
 SCALE: AS SHOWN
 PROJECT NO.: 124.112
 SHEET NO.: 2 OF 4
 PRINT DATE: 12/05/18
 DOCUMENT NO.:

Handwritten signature and date: J.B. Bosco 1/9/19

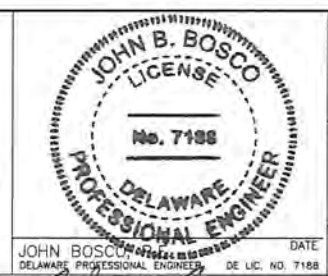


SCHEDULE OF REVISIONS				
NO.	DESCRIPTION OF CHANGES	DRAWN BY	DATE	ISSUE STATUS
7				
6				
5				
4	SUSSEX COUNTY PLANNING & ZONING REVIEW LTR. 01/07/2018	J.L.	P.J.T.	C
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2	REVISED PER COMMENTS	A.R.C.	P.J.T.	B
1	COMMENTS INCORPORATED	J.L.	P.J.T.	A
0	ISSUED FOR REVIEW	J.L.	P.J.T.	A

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COMPOUND PLAN AND ELEVATION
 PROJECT: DOV HOLLYVILLE, 22602 HARBESON ROAD, HARBESON, DE 19951, SUSSEX COUNTY
 PROPERTY OWNER: JOHN W. DAVIDSON TRUSTEE

DRAWING ISSUE STATUS CURRENTLY - C	
ISSUE	DATE
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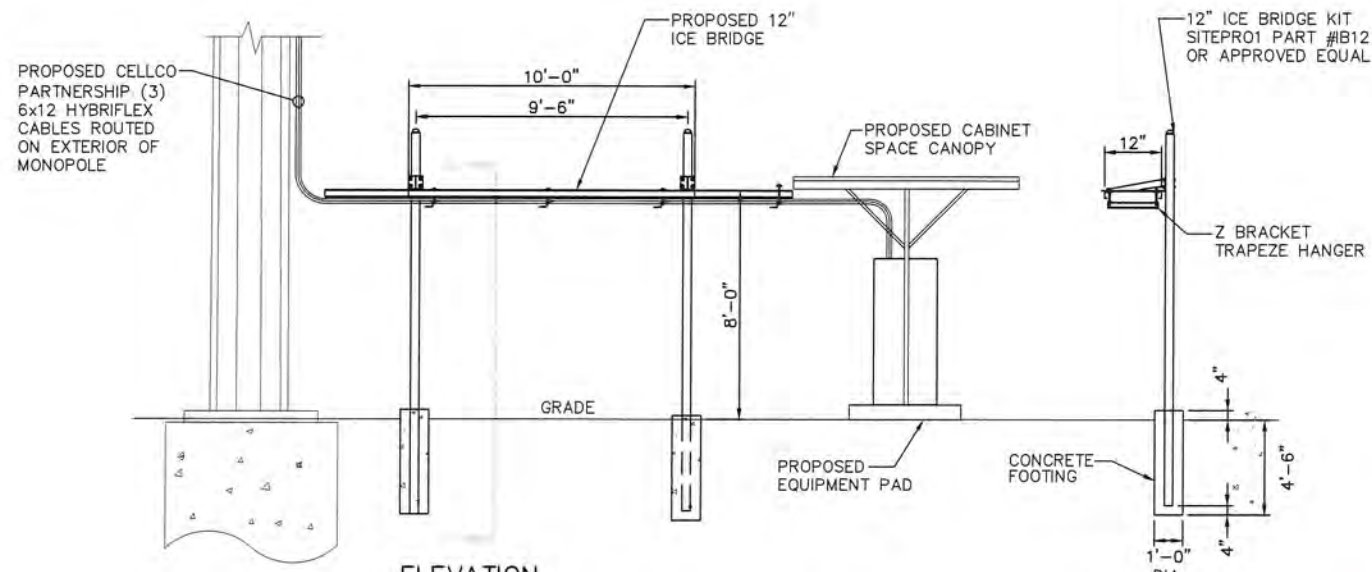
FIRST ISSUE: 05/16/18	DRAWING NO. SP-2
DRAWN BY: J.L.	CHECKED BY: P.J.T.
SCALE: AS SHOWN	SHEET NO. 3 OF 4
PROJECT NO. 124.112	PRINT DATE: 12/05/18
DOCUMENT NO.	

Handwritten signature and date: J.B. Bosco 1/9/19

MECHANICAL SPECIFICATIONS
 OVERALL HEIGHT: 72.0
 WIDTH: 11.9
 DEPTH: 7.1
 WEIGHT EXCLUDING BRACKETS: 43.7 LBS.

**COMMSCOPE
 NHH-65B-R2B
 (OR EQUIVALENT)**

1 **DETAIL**
 SP-3 NOT TO SCALE

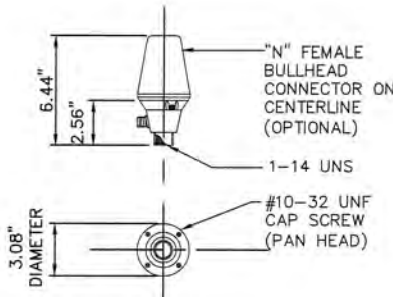


ELEVATION

SECTION A-A

CABLE BRIDGE

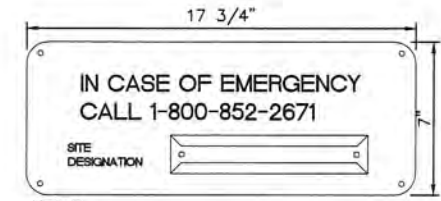
2 **DETAIL**
 SP-3 NOT TO SCALE



NOTE: PROVIDE 1/2" COAX CABLE FOR CONNECTION

GPS UNIT

3 **DETAIL**
 SP-3 NOT TO SCALE



NOTES:
 1) MOUNTING HEIGHT TO BE 5'-0" ABOVE GRADE TO CENTERLINE OF SIGN.

EMERGENCY SIGN

4 **DETAIL**
 SP-3 NOT TO SCALE

L-810 OBSTRUCTION LIGHT

5 **DETAIL**
 SP-3 NOT TO SCALE

SCHEDULE OF REVISIONS					
NO.	DESCRIPTION OF CHANGES	DRAWN BY	AUTH. BY	ISSUE STATUS	ISSUE DATE
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6					
5					
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 BLUE BELL, PA. 19422
 TEL: (610) 715-6000

PROPERTY OWNER:
JOHN W. DAVIDSON TRUSTEE

DRAWING TITLE:
ANTENNA AND SITE DETAILS

DRAWING ISSUE STATUS CURRENTLY - C
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 C - ISSUED FOR CONSTRUCTION PERMITS/BIDS
 D - ISSUED FOR CONSTRUCTION
 E - (SPECIFY)

FIRST ISSUE: 05/16/18
 DRAWN BY: J.L.
 CHECKED BY: P.J.T.
 SCALE: AS SHOWN
 PROJECT NO: 124.112
 SHEET NO. 4 OF 4
 PRINT DATE: 12/05/18
SP-3

Handwritten signature and date: J.B. Bosco 1/9/19