



STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF STATE PLANNING COORDINATION

January 18, 2019

Mr. Ron Sutton
Civil Engineering Associates
55 West Main Street
Middletown, DE 19709

RE: PLUS review 2018-12-01; Lewes Waterfront Preserve

Dear Ron:

Thank you for meeting with State agency planners on December 19, 2018 to discuss the proposed plans for the Lewes Waterfront Preserve project. According to the information received you are seeking review of a 90 unit subdivision on 34.64 acres along New Road within the City of Lewes.

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 the City of Lewes is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the city.**

Strategies for State Policies and Spending

This project is located in Investment Level 2 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

- Because the site fronts on New Road (Sussex Road 266), which is part of the Historic Lewes Byway, the applicant should expect the following requirements, some of which are reiterated elsewhere in these comments:
 - No new billboards, variable message boards, or electronic changing message sign(s) anywhere on or off New Road within 660 feet of the closest right-of-way edge.
 - Byways signs may be required along New Road.
 - There is a New Road Master Plan being developed by DelDOT, the Historic Lewes Byway Committee, Sussex County, and other key stakeholders (including developers). As part of that work, a typical cross section for future roadway and right-of-way improvements in consideration of context sensitive design solutions for Byway Transportation Corridors is being developed. The Master Plan and the cross section have yet to be fully developed but, once they are adopted, DelDOT will consider them in determining the off-site improvements they will require along New Road.
 - A Shared Use Path (SUP) should be provided across the entire property frontage on New Road, subject to coordination with DelDOT's planned replacement of the New Road bridge over Canary Creek and with a SUP that may be built on the opposite side of New Road as part of the Tower Hill (Groome) development. Presently, DelDOT anticipates that the SUP will transition from one side of New Road to the other at Schaffer Lane, which would be consistent with byway management goals and, likely, with the future Master Plan for this corridor.
 - As part of the plan review process, the applicant may be required to look for context sensitive design solutions with regard to the location and screening or buffering of their development from New Road. Landscaping or landscaping design placed in public right of way or within dedicated easements, possibly including landscaped median islands, may be dictated.
 - The applicant may be asked to work with, or provide updates, to the Historic Lewes Byway Committee and per implementation of the New Road Master Plan. With regard to the Committee, the applicant may contact Byways Chair, Ms. Gail Van Gilder, or her designee. Ms. Van Gilder may be reached at gailvangilder@gmail.com or (302) 540-2433.
- The site access on New Road 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. DeIDOT anticipates collecting the Initial Stage Fee when the record plan is submitted for review and the Construction Stage Fee when construction plans are submitted for review.
- In accordance with Section 1.2.1 of the Manual, DeIDOT anticipates requiring that the entrance be placed opposite Creekside Drive.
- 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 587 vehicle trip ends per day, which appears to have been calculated using the 9th edition of the Institute of Transportation Engineers' (ITE) Trip Generation Manual. As shown in the table below, DeIDOT calculates that the development would generate 640 vehicle trip ends per day on weekdays.

Land Use	Average Daily Traffic	AM Street Peak Hour	PM Street Peak Hour
90 units Multifamily Housing (Low-Rise, 1 to 2 floors)	640	43	54

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 DeIDOT identifies a need for a TOA in the plan review process. DeIDOT will require that the applicant provide either a TIS or payment of the fee.

Off-site improvements that DeIDOT can readily identify without a TIS or TOA are as follows:

- A contribution to DeIDOT's planned project to replace the Canary Creek Bridge. Presently DeIDOT expects to raise the elevation of the bridge, by an amount yet to be

determined, so they may need additional rights-of-way that would be compensable and could count as a contribution.

- Improvements to New Road to meet DelDOT standards. DelDOT's standard for collector roads, such as New Road, is 12-foot lanes and 8-foot paved shoulders, although they may depart from this standard based on the Master Plan for New Road once that Plan is adopted. Based on what DelDOT recently negotiated with regard to the Tower Hill development, DelDOT may accept 11-foot lanes and 6-foot paved shoulders to minimize the right-of-way impacts on surrounding properties.
- 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 New 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 on New Road. By this regulation, this dedication is to provide a minimum of 40 feet from the physical centerline of New 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 a 15-foot wide permanent easement across the property frontage on New 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.**"
- 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 300 feet of the proposed entrances.
- 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.
- Referring to Section 3.5.4.2.A of the Manual, all developments in Level 1 and 2 areas, relative to the Strategies for State Policies and Spending, are required to install a sidewalk or Shared Use Path along their frontage. In Level 3 and 4 areas, the requirement is at DelDOT's discretion. DelDOT anticipates requiring a Shared Use Path (SUP) along the south side of New Road within the limits of the development frontage. While it may be appropriate to stop the SUP short of the north limits due to DelDOT's bridge replacement project, a tie-in to the shoulder of New Road should be provided in accordance with the SUP and/or Sidewalk Termination Reference Guide available at <https://www.deldot.gov/Business/subdivisions/pdfs/SW-SUPTerminationReferenceGuide8-1-18.pdf>.
- In accordance with Section 3.5.4.4, an access-way should be provided to connect the north end of the internal street proposed parallel to New Road to the Shared Use Path running along the road. Depending on the timing of the street construction and DelDOT's bridge project, it may be appropriate for DelDOT to complete that work at the developer's expense.
- 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 New 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

Forest and Natural Areas

- The project parcel includes an 8.72 acre section of the Great Marsh Natural Area. The Natural Area designation means that this area is considered an important forested and wetland habitat resource within the region. The project design submitted with the application indicates that this area will be preserved and that no forested areas will be

removed. DNREC staff can provide guidance about habitat management or assist with developing a maintenance plan for the area.

Wetlands

- The forested area contains estuarine and palustrine wetlands; but no impacts to these areas are anticipated. The developer is encouraged to ensure a minimum 100' vegetated buffer from wetlands for both habitat and water quality benefits. Preserving the existing forested buffer may help achieve these.

Flooding and Sea Level Rise

- Portions of the subject parcel, along the tributary to the Broadkill River Watershed, are within a Zone AE floodplain (14.17 acres). The plan design as presented, appears to avoid building new structures within these areas.
- This parcel is expected to be impacted by permanent inundation due to future sea level rise (<http://de.gov/slrmap>), primarily within the area currently mapped as the Zone AE floodplain. The plan design avoids building within these areas, however, in the coming decades, structures and infrastructure bordering the current floodplain could experience flooding.

Source Water Protection.

- There are no well head protection areas or excellent groundwater recharge areas mapped on this site.

State Historic Preservation Office – Contact Carlton Hall 736-7404

- The Delaware SHPO has concerns about this development as it may affect a known archaeological site, and impact areas with a high potential for sites and burials. The Derrickson Site (S00533) is recorded on the northern part of the parcel. The Derrickson Site was investigated in the 1950s; it had features containing artifacts associated with Native Americans and the earliest European settlers who colonized Delaware. A Native American was also excavated from the area at that time. A limited surface survey of the parcel was conducted in the 1970s.
- SHPO appreciates the developer's proactive response to comments provided at the PLUS meeting in seeking specific information about the Derrickson Site. This office has provided the developer with the information on the site currently available to them, and will forward any additional information they locate.
- The Delaware SHPO is concerned about important archaeological material still present at this site and additional human remains that may be present and subsequently disturbed by development. At this time the full nature and extent of the 1950s investigation is not clear, nor is it known to what degree a subsequent borrow pit operation may have

affected the site. Delaware SHPO requests that the developer consult with their office to determine the level of work needed to address these questions, including further research and an archaeological survey of the parcel. Such work should occur, and be available for review, prior to any final decision on the design of the development. To this purpose, the SHPO requests a copy of all studies performed on the property in order to give informed guidance on the protection of archaeological resources per 7Del.C.CH. 53, as well as the protection of unmarked burials per 7Del.C.CH. 54.

- Disturbing unmarked graves or burials triggers the Delaware's Unmarked Human Burials and Human Skeletal Remains Law (Del. C. Title 7, Ch. 54), and such remains or discoveries can result in substantial delays while the procedures required under this law are carried out. In the event of a discovery 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.
- 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. Owners and developers who may plan to apply for an Army Corps of Engineers permit or for federal funding, such as HUD or USDA grants, should be aware of the National Historic Preservation Act of 1966 (as amended). If you need further information or additional details pertaining to the Section 106 process and the Advisory Council's role; please review the Advisory Council's website at the following: www.achp.gov

Delaware State Fire Marshall's Office – Contact Dwayne Fox 302-856-5298

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 townhouse type dwellings it shall be capable of delivering at least 1000 gpm for 1-hour duration, at 20-psi residual pressure. Fire hydrants with 800 feet spacing on centers are required. For the area where single-family dwellings will be constructed, the water distribution system only needs to 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.

Fire Protection Features

- For townhouse buildings, provide a section / detail and the UL design number of the 2-hour fire rated separation wall on the Site plan

Accessibility:

- All premises, which the fire department may be called upon to protect in case of fire, and which are not readily accessible from public roads, shall be provided with suitable gates and access roads, and fire lanes so that all buildings on the premises are accessible to fire apparatus. Additionally, where trees are to be situated adjacent to travel roads in the subdivision, some forethought should be exercised regarding how future growth of the trees may affect fire department travel throughout the subdivision.
- Fire department access shall be provided in such a manner so that fire apparatus will be able to locate within 100 ft. of the front door.
- Any dead end road more than 300 feet in length 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

- Townhouse 2-hr separation wall details shall be shown on site plans
- Maximum Height of Buildings (including number of stories)
- Provide Road Names, even for County Roads

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

- DelDOT offers the following comments to address questions raised by the City of Lewes at the PLUS meeting:
 - DelDOT is presently analyzing the combined effects of the planned Minos Conaway Grade Separated Intersection and the planned realignment of the Old Orchard Road at Savannah Road. DelDOT expects to complete that analysis by late February 2019.
 - DelDOT has initiated a project to replace the New Road Bridge over Canary Creek and to raise the road above flood elevation and is presently gathering information to help define the limits, scope and impact of the project. They estimate that they are four to five years from beginning construction. As necessary, the City and others may contact DelDOT's State Bridge Engineer, Mr. Jason Hastings, with questions specific to the DelDOT project. Mr. Hastings may be reached at Jason.Hastings@state.de.us or (302) 760-2299. The developer's engineer should continue to coordinate with DelDOT's Sussex County Review Coordinator, Mr. Steven Sisson, on the interface of the proposed development and its improvements to New Road with the DelDOT project. Mr. Sisson may be reached at Steven.Sisson@state.de.us or (302) 760-2553.
- The applicant should expect a requirement that the plan show the lands needed for the Canary Creek bridge replacement with as much specificity as possible. Showing these lands on the plan is important to avoid the creation of non-conforming lots and to provide as much information as possible about the project to potential homebuyers.
- DelDOT suggests that the 15-foot permanent easement that is to be established for the Shared Use Path be enlarged in anticipation of landscaping or buffer needs. This is a developer option if deemed appropriate. Landscape screening or berming is encouraged under the Historic Lewes Byway's Corridor Management Plan.

- DelDOT suggests that the proposed path parallel to Canary Creek Drive be extended to include a connection to that street if the owners of that street are amenable to it.
- DelDOT is aware of community interest in several amenities near the Canary Creek bridge, including a ramp or dock for kayak and canoe access, a parking area to facilitate that access and a boardwalk along Canary Creek from New Road to the Draper (Lewes-Georgetown) Trail. DelDOT has no requirement with regard to these facilities and has yet to determine whether or to what extent they can or will be provided or accommodated within DelDOT rights-of-way. DelDOT mentions them here only to bring them to the developer's attention.
- 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 New 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 as of August 1, 2015, all new plan submittals and re-submittals, including major, minor and commercial plans, shall now be uploaded via the PDCA (Planning Development Coordination Application) with any review fee paid online via credit card or electronic check. Guidance on how to do this is available on our website at <http://www.deldot.gov/Business/subdivisions/index.shtml>.
- Please be advised that the Standard General Notes have been updated and posted to the DelDOT website. Please begin using the new versions and look for the revision date of December 8, 2017. The notes can be found at <http://www.deldot.gov/Business/subdivisions/index.shtml>.

Delaware State Fire Marshall's Office – Contact Dwayne Fox 302-856-5298


- Although not a requirement of the State Fire Prevention Regulations, the Office of the State Fire Marshal encourages home builders to consider the benefits of home sprinkler protection in dwellings. The Office of the State Fire Marshal also reminds home builders that they are obligated to comply with requirements of Subchapter III of Chapter 36 of Title 6 of the Delaware Code which can be found at the following website: <http://delcode.delaware.gov/title6/c036/sc03/index.shtml>
- Preliminary meetings with fire protection specialists are encouraged prior to formal submittal. Please call for appointment. Applications and brochures can be downloaded

from our website: www.statefiremarshal.delaware.gov, technical services link, plan review, applications or brochures.

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

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

Sincerely,



Constance C. Holland, AICP

Director, Office of State Planning Coordination

CC: City of Lewes