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July 11, 2013

Office of State Planning Coordination
122 William Penn Street
Third Floor
Dover, Delaware 19901

Attn: Constance C. Holland, AICP

Re: PLUS review – 2012-03-02; Ocean View Beach Club
DBF# 1443B002

Dear Ms. Holland:

I appreciated the opportunity to meet with representatives of the various agencies at the PLUS meeting held on March 28, 2012. This letter is in response to comments received from State Planning Coordination dated April 20, 2012. We offer the following in response to those comments:

Strategies for State Policies and Spending

This project is located in Investment Level 2 according to the State Strategies for Policies and Spending. Investment Level 2 reflects areas where growth is anticipated by local, county, and State plans in the near term future. State investments will support growth in these areas.

Code Requirements/Agency Permitting Requirements

State Historic Preservation Office – Contact Terrence Burns 736-7404

- *There is an early 20th-century house/dwelling (S-2344) within this parcel along West Street (Muddy Neck Rd), and according to the Pomeroy and Beers Atlas of 1868, it may be the same as or on the same site as the W. Delunt House, which is shown on Pomeroy and Beers Atlas. In addition, there is also may be archaeological resources associated with this dwelling as well. Furthermore, there is also a known Archaeological Site (S11891, 7S-K-178) very close to this parcel, near the north side. With this in mind, the developer should also be aware of Delaware's Unmarked Human Burials and Human Skeletal Remains Law, which is outlined in Chapter 54 of Title 7 of the Delaware Code.*

Abandoned or unmarked family cemeteries are very common in the State of Delaware, and often they are on historic farm sites, rural areas or open space lands. Disturbing unmarked burials triggers Delaware's Unmarked Human Burials and Human Skeletal Remains Law (Delaware Code Title 7, Chapter 54), and such remains or discoveries can result in substantial delays while the procedures required under this law are carried out. The Division of Historical & Cultural Affairs recommends that owners and/or developers have a qualified archaeological consultant investigate their project area for the presence of such a cemetery. If a cemetery is discovered, it is very costly to have it archaeologically excavated and the burials moved. In the event of such a discovery, the Division of Historical & Cultural Affairs recommends that the plans be re-drawn to leave the cemetery on its own parcel or in the open space area of the development, with the responsibility for its maintenance lying with a homeowners association or development. If you need or would like to read more information that pertains to cemeteries or unmarked human remains, please go to the following websites for additional information at ww.history.delaware.gov/preservation/umhr.shtml and ww.history.delaware.gov/preservation/cemeteries.shtml .

Prior to any demolition or ground-disturbing activities (such as development or construction activities), the developer should consider hiring an archaeological consultant to examine the parcel for archaeological sites, such as a cemetery or unmarked human remains. The developer should also include consider maintaining the early 20th-century house/dwelling (S-2344) within the development if possible.

- If there is any federal involvement with the project, 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). Regulations promulgated for Section 106 of this Act stipulate that no ground-disturbing or demolition activities should take place before the Corps or other involved federal agency determines the area of potential effect of the project undertaking. These stipulations are in place to allow for comment from the public, the Delaware State Historic Preservation Office, and the Advisory Council for Historic Preservation about the project's effects on historic properties. Any preconstruction activities without adherence to these stipulations may jeopardize the issuance of a permit or receipt of funding if it is determined that such opportunity to comment has been foreclosed. 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 www.achp.gov.*

We are aware of Delaware's Unmarked Human Burials and Human Skeletal Remains Law and will comply with all federal regulations associated with development activity.

Department of Transportation – Contact Bill Brockenbrough 760-2109

- *Please refer to DelDOT's Standards and Regulations for Subdivision Streets and State Highway Access (February 15, 2010) for the design of the site entrance. The website for the Standards and Regulations is:
http://www.deldot.gov/information/pubs_forms/*
- *Item 25 on the PLUS application shows that the site would generate 2,864 trips per day. Because the site would generate more than 400 trips per day, a Traffic Impact Study is warranted in accordance with Section 2.3.1 of the Standards and Regulations. A TIS was completed in July 2006 for a previous plan for this property, then known as the Berzins Property or Canal Landing. DelDOT sent comments on the TIS to the Town on April 17, 2007. Since November 7, 2011, we have been in discussions with the developer's engineer regarding the TIS and the recommendations contained in that comment letter. Briefly, because the current proposal will generate less traffic and because some of the developments that were considered committed in the TIS are now no longer planned, some of the recommended off-site improvements are now unnecessary. DelDOT does not require a new TIS.*

The off-site improvements that are still necessary will need to be noted on the Record Plan, including for each one an indication as to when the improvement needs to be done.

- *As indicated on the DelDOT Meeting Request Form, available at <http://www.deldot.gov/information/business/>, because the site would generate 2,864 trips per day, a pre-submittal meeting is required. The purpose of such meetings, similar to PLUS meetings, is to identify problems with your plan so that they can be corrected before the plan enters the formal plan review process. DelDOT hopes the November 7, 2011, meeting mentioned above, was helpful, it was not sufficient in this regard.*
- *Referring to the Standards and Regulations, Section 3.4.1, Traffic Information, traffic generation diagram is required.*
- *Referring to the Standards and Regulations, Section 3.5.5.5, Bus Stop Criteria, a bus stop should be provided for this project.*
- *Referring to the Standards and Regulations, Section 3.6.5, Dedication of Right-Of-Way, and Figure 3-3, Minimum Standards for Total Roadway Right-Of-Way, the project shall be subject to dedicate 30 feet of right-of-way from the Muddy Neck Road centerline.*
- *Referring to the Standards and Regulations, Section 5.1.6, Shared Use Path, a 15-foot wide permanent easement will need to be established across the property frontage for a future 10-foot wide multi modal path. The location of the easement shall be outside the limits of the ultimate right-of-way for this road. 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 for a future 10-foot wide multi-modal path is hereby established, as per this plat.”

- *Referring to the Standards and Regulations, Appendix J – General Notes for Construction Plan, the note concerning the maintenance of the sidewalk/multi modal path is required*
- *Referring to the Standards and Regulations, Appendix J – General Notes for Construction Plan, a note concerning the maintenance of the subdivision streets is required. If public streets are proposed, the standard note will need to be modified to reflect Town, rather than State maintenance.*
- *In accordance with Section 3.4 of the Standards and Regulations, when submitting a site plan to obtain a Letter of No Objection for this project, following information will be required:*

*Initial Stage Fee Calculation Form
Initial Stage Review Fee
Gate-Keeping Checklist – Site Plan
Design Checklist – Record Plan*
Owners and Engineer’s name and e-mail address
Three (3) paper sets of the Site/Record Plan
Conceptual Entrance Plan
CD with a pdf of the Site/Record Plan
Submission of the Area-Wide Study Fee (If applicable)*

- *For the design checklist for the site plan, please refer to the Standards and Regulations, Appendix D, Checklist for Subdivision Record Plan Approval.*
- *Referring to the Standards and Regulations, Section 4.4, Commercial Entrance Plan Checklist, provides that an entrance plan shall be prepared prior to DelDOT issuing entrance approval. The following information will be required for Entrance Plan review:*
 - Construction Stage Fee Calculation Form*
 - Construction Review Fee*
 - Gate-Keeping Checklist – Entrance Plan*
 - Design Checklist – Entrance Plan*
 - Three (3) paper sets of the Entrance Plan*
 - SWM Report and Calculations (If applicable)*
 - CD with a pdf of the Entrance Plan*

We have worked with DelDOT and obtained a letter of no objection to recordation from the department as well as DelDOT’s acceptance of the Entrance Plans and offsite improvements per the TIS.

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

Wetlands

- *According to the Statewide Wetland Mapping Project (SWMP) maps, palustrine wetlands (PEMIC7, PF01C & PUBHx) were mapped in the area proposed for development (See figure 1). This project shows several (at least 3) road crossings that would require Subaqueous Lands Permits. The developer or their consultant should contact DNREC's Wetlands and Subaqueous Lands Section to determine what permitting requirements would apply and to discuss ways to minimize impacts. There are no State regulated wetlands, but the applicant should have a Corps verified Jurisdictional Determination to determine 404 wetland impacts and the limits of waters of the U.S.*

We have Jurisdictional Determinations from the Army Corp of Engineers as well as from DNREC. We have applied for Wetlands and Subaqueous permits for impacts (road crossings and stormwater outfalls).

TMDLs

- *The project is located in 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 water body” 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 a 40 percent reduction in nitrogen and phosphorus from baseline conditions. The TMDL also calls for a 40 percent reduction in bacteria from baseline conditions.*
- *A nutrient management plan is required under the Delaware Nutrient Management Law (3 Del. C., 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>.*
- *The adopted Inland Bays Pollution Control Strategy regulation was published in the Delaware Register of Regulations on November 11, 2008 and is now an enforceable regulatory directive. A Pollution Control Strategy (PCS) is an implementation strategy*

that identifies the actions necessary (regulatory and nonregulatory) to systematically reduce the pollutant loading to a given water body, and meet the TMDL reduction requirements specified for that water body. These regulations can be reviewed at <http://regulations.delaware.gov/documents/November2008c.pdf> and background information, guidance documents, and mapping tools can be retrieved from http://www.dnrec.state.de.us/water2000/Sections/Watershed/ws/ib_pcs.htm.

- *The applicant should assess nutrient loading on their parcel through the DNREC developed 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) that result from the conversion of individual or combined land parcels to a different land use(s), while providing applicants with quantitative information about their 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 Lyle Jones at 302-739-9939 for more information on the protocol.*

Section 1.4 of the Pollution Control Strategy for the Indian River, Indian River Bay, Rehoboth Bay and Little Assawoman Bay Watersheds (Inland Bays PCS) regulations states

“Proposed major subdivision plans, site plans, concept plans, initial stage calculation sheets, requests for service level evaluation, or requests for scoping meetings which have been received by DelDOT prior to the effective date of this regulation for a development proposal, for the purpose of securing a letter of no objection, support facilities report, entrance location, or entrance approval, are not subject to the buffer and stormwater requirements of these Regulations, Sections 4 and 5.”

A Traffic Impact Study (TIS) was performed for this project for the purpose of entrance location and ultimate approval. We received a TIS review letter from the Delaware Department of Transportation dated April 17, 2007. This is prior to the effective date of November 11, 2008 for the PCS regulation. Therefore, this project is not subject to the buffer and stormwater requirements of the PCS regulations.

Water Supply

- *The information provided indicates that The Town of Ocean View/Tidewater Utilities will provide water to the proposed project via a public water system. Our records indicate that The Town of Ocean View/Tidewater Utilities does not currently hold a certificate of public convenience and necessity (CPCN) to provide public water in these areas. If The Town of Ocean View/Tidewater plans on annexing this project to their municipality, then according to §203C, Subchapter II, Chapter 1, Title 26, Delaware Code, the municipality is required to give notice to the Public Service Commission when the annexation is complete. Information on CPCN requirements and applications can be obtained by contacting the Public Service Commission at 302-736-7547. The Division of Water Resources will consider applications for the construction of on-site wells provided the*

wells can be constructed and located in compliance with all requirements of the Regulations Governing the Construction and Use of Wells. A well construction permit must be obtained prior to constructing any wells.

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

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

We have obtained acceptance of the Utility Plans for this project for water distribution from Tidewater Utilities. The contractor will be notified that any necessary dewatering permits must be obtained.

Sediment and Stormwater Program

- *A detailed sediment and stormwater plan will be required prior to any land disturbing activity taking place on the site. The addition of the commercial acreage will require a revision to any submitted plan. Contact the reviewing agency to schedule a project application meeting to discuss the sediment and erosion control and stormwater management components of the plan as soon as practicable. The site topography, soils mapping, pre- and post-development runoff, and proposed method(s) and location(s) of stormwater management should be brought to the meeting for discussion. The plan review and approval as well as construction inspection will be coordinated through Sussex Conservation District. Contact Jessica Watson at the Sussex Conservation District at (302) 856-2105 for details regarding submittal requirements and fees. (Title 7, Delaware Code, Chapter 40 and Delaware Regulations, Title 7, Administrative Code, 5101)*

We have obtained acceptance of a detailed sediment and stormwater plan for this project from the Sussex Conservation District.

Assawoman Canal Trail

- *In 2009, a Working Group formed to determine the feasibility of a trail along the Assawoman Canal. The Working Group included municipal leaders from Ocean View, Bethany Beach and South Bethany, community representatives from Salt Pond, Sea Colony, Bahamas Beach, and Waterside and staff from Delaware's Department of*

Natural Resources and Environmental Control, Division of Parks and Recreation (Division). The Working Group evaluated current conditions, public input, natural and cultural resources and recreation preferences. This successful partnership guided the development of the Assawoman Canal Trail Concept Plan.

In September 2011, a Concept Plan for the Assawoman Canal Trail was finalized. The Plan identifies a meandering bike and pedestrian trail on both sides of the Assawoman Canal. This proposed development is adjacent to the state owned canal property that will have the trail. To ensure the privacy of future residents, the maximum setbacks should be required for the parcels adjacent to the Canal. To date, the Towns of Ocean View,

Bethany Beach and South Bethany along with the communities of Sea Colony and Bahamas Beach Cottages have all approved resolutions in support of the trail concept plan and for moving into design and engineering.

We contacted Robert Ehemann of DNREC, Division of Parks and Recreation and coordinated a trail stub to accommodate a connection to the Assawoman Canal Trail.

Hazardous Waste Sites

- *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.*

We have included provisions for remediation of hazardous wastes for this site in the demolition plans in accordance with all local, state and, federal regulations.

Delaware State Fire Marshall's Office – Contact Duane Fox 739-4394

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

- *Fire Protection Water Requirements:*
 - o *Water distribution system capable of delivering at least 1500 gpm for 2-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers. (Mercantile)*

- o Water distribution system capable of delivering at least 1000 gpm for 1-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers. (Townhouses)*
 - o 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. (Single Family Dwelling)*
 - o Where a water distribution system is proposed for the site, the infrastructure for fire protection water shall be provided, including the size of water mains for fire hydrants and sprinkler systems.*
- *Fire Protection Features:*
 - o All structures over 10,000 sq. ft. aggregate will require automatic sprinkler protection installed.*
 - o Buildings greater than 10,000 sq. ft. 3-stories or more, over 35 feet, or classified as High Hazard, are required to meet fire lane marking requirements*
 - o Show Fire Department Connection location (Must be within 300 feet of fire hydrant), and detail as shown in the DSFPR.*
 - o Show Fire Lanes and Sign Detail as shown in Delaware State Fire Prevention Regulations*
 - o 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*
 - o 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.*
 - o 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.*
 - o 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.*
 - o The use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.*

- o 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:*
 - o Provide type of fuel proposed, and show locations of bulk containers on plan.*
- *Required Notes:*
 - o 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”*
 - o Proposed Use*
 - o Alpha or Numerical Labels for each building/unit for sites with multiple buildings/units*
 - o Square footage of each structure (Total of all Floors)*
 - o National Fire Protection Association (NFPA) Construction Type*
 - o Maximum Height of Buildings (including number of stories)*
 - o Townhouse 2-hr separation wall details shall be shown on site plans*
 - o Note indicating if building(s) is/are to be sprinklered*
 - o Name of Water Provider*
 - o Letter from Water Provider approving the system layout*
 - o Provide Lock Box Note (as detailed in DSFPR) if Building is to be sprinklered*
 - o Provide Road Names, even for County Roads*
- *Preliminary meetings with Fire Protection Specialists are encouraged prior to formal submittal. Please call for appointment. Applications and brochures can be downloaded from our website: www.statefiremarshal.delaware.gov, technical services link, plan review, applications or brochures.*

We have worked through these issues with the Fire Marshal and obtained site approval for this project.

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 these suggestions can benefit the project.*

Department of Transportation – Contact Bill Brockenbrough 760-2109

- *The proposed streets would necessarily be maintained either privately or municipally and therefore are outside DelDOT's jurisdiction. Nonetheless, DelDOT recommends that further attention be given to the northeast corner of the site, where it appears that one-way flow is proposed around a roughly triangular island. Our experience is that homeowners generally do not like to have one-way flow past their driveways and will at times drive counter to the posted direction, creating an unsafe situation. DelDOT suggests that this area be reconfigured to provide for two-way flow on all sides and eliminate the Y-shaped intersection.*
- *The developer's engineer should determine whether any utilities will need to be relocated as part of this project. The developer should expect a requirement that any utility relocations necessary for their entrance construction be done prior to DelDOT issuing an entrance permit.*
- *DelDOT understands that the five stub streets proposed for interconnection to the church property north of the subject development are a Town requirement. DelDOT generally supports interconnections between adjoining developments. However, we note that the westernmost stub street, in particular, would mean that the entrance to the church property would also serve as a secondary entrance to the subject development. The design for that entrance would have to account for that additional traffic, which could prove difficult for the developer of the church property given that their access road has a relatively narrow right-of-way. If the Town requires this connection to be made, they should also require the developer of Ocean View Beach Club to provide sufficient land for an entrance design that accommodates the traffic from both properties.*

We have worked through these issues with DelDOT and obtained a letter of no objection to recordation from the department.

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

Soils Assessment

- *Based on soils survey mapping update, Mullica (MmA) and Klej (KsA) are the principal soil mapping units mapped in the immediate vicinity of the proposed project. Mullica is a very poorly-drained wetland associated (hydric) soil that has severe limitations for development and considered unsuitable for development. Klej is a somewhat poorly-drained soil that is likely to contain both upland and wetland soil components. The area bounded by the Mullica soil map unit should be avoided; filling or disturbing soils in this map unit may increase the potential for on-site and off-site flooding potentials (See figure 2). Please note that the presence of the Mullica soil mapping unit in the forested portions*

of the parcel suggests that wetland presence may be more extensive than the SWMP mapping indicates.

We have Jurisdictional Determinations from the Army Corp of Engineers as well as from DNREC.

Additional information on TMDLs and water quality

- *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, DNREC recommends that the applicant maintain/establish a minimum 100-foot upland buffer (planted in native vegetation) from all water bodies (including ditches) and wetlands.*
- *Maximize the amount and/or preservation of passive wooded open space. We further recommend additional planting of native trees or shrubs wherever possible.*
- *The applicant should 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, and roads) included in the calculation.*
- *Since this is a large project that will likely generate a great amount of impervious cover, we strongly advise the use of pervious paving materials (instead of conventional asphalt and concrete) as a BMP to reduce the impacts associated with surface imperviousness, wherever practicable.*
- *We recommend the use of rain gardens, and green-technology storm water management structures (in lieu of open-water management structures) as BMPs to mitigate or reduce nutrient and bacterial pollutant impacts via runoff from impervious surfaces.*
- *The applicant should voluntarily 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 (e.g., nitrogen and phosphorus) and bacterial loading that result from the conversion of individual or combined land parcels to a different land use(s), while providing applicants with quantitative information about their project’s impact(s) on baseline water quality. We encourage the applicant/developer use this protocol to help them design and implement the most effective BMPs. Please contact Lyle Jones at 302-739-9939 for more information on the protocol.*

We have incorporated green technology BMPs where possible and obtained acceptance of a detailed sediment and stormwater plan for this project from the Sussex Conservation District. There are 25 foot buffers from all wetlands. We are incorporating native plantings in the proposed landscape plan.

General Observations about Site Design

- *A development on this parcel was reviewed via PLUS as Canal Landing at West Bethany (PLUS 2006-05-09). The site design at that time would result in over 13 acres of forest loss and disturbance within 100 feet of wetlands. Our recommendations were to reduce forest loss and increase wetland buffers. The current project as designed will result in a greater amount of forest loss (more than 18 acres), filling of a small wetland, and the minimum required 25-foot wetland buffers. In addition, the open space has been reduced and is mostly sprinkled throughout the development rather than a larger, contiguous area which is less of an impact to wildlife. It is clear that our recommendations to reduce impacts to wildlife and wildlife habitat were not incorporated into this new design.*

The current design concentrates preservation of woodland near the large wetland area and the Assawoman Canal.

Rare, Threatened and Endangered and Species of Greatest Conservation Need (SGCN)

- *The Division of Fish and Wildlife scientists have not surveyed this project area; therefore, we are unable to provide information pertaining to the existence of state-rare or federally listed plants, animals or natural communities at this project site. In the absence of site-specific information, we offer the following comments:*

Habitat Loss and Forest Fragmentation

- *This project will result in forest loss and fragmentation. Forest fragmentation separates wildlife populations, increases road mortality, and increases “edge effects” that leave many forest dwelling species vulnerable to predation and allows the infiltration of invasive species. As the forest is converted into a residential development, wildlife will have to disperse into the surrounding area and there are very few intact forest blocks left in this general area. Research has shown that the cumulative loss of forest in Delaware has led to a corresponding loss of forest-dependent species (Environmental Law Institute. 1999. *Protecting Delaware's Natural Heritage: Tools for Biodiversity Conservation*. ISBN#1-58576-000-5). For migratory birds, it is extremely important to conserve large tracts of forests in the State of Delaware due to its position within the Atlantic flyway. Smaller forest blocks can also provide nesting habitat and a ‘stop-over’ for migratory species.*

Wetlands, especially forested wetlands, can provide habitat for an array of plant and animal species. Upland buffers around wetlands are equally important, not only for the protection of water quality, but because buffers provide critical habitat for wildlife. It should be recognized that wetlands considered 'isolated' provide habitat and perform many of the same environmental functions as other wetlands, including filtering pollutants, recharging streams and aquifers, and storing flood waters. The lack of regulatory protection for this wetland type in Delaware is not based on science and does not reflect the ecological importance of this wetland type. Other states in the U.S. have state acts and regulations that make no distinction between isolated and non-isolated wetlands.

Cumulative habitat loss throughout the state is of utmost concern to our Division which is responsible for conserving and managing the states wildlife. Because of an overall lack of regulatory protection, we have to rely on landowners and/or the entity that approves projects (i.e. counties and municipalities) to consider implementing measures that will aide in habitat loss reduction. Therefore, we recommend the following to reduce impacts to wildlife and wildlife habitat:

- 1) It is recommended that consideration be given to re-designing this 'maximum yield' site plan to minimize forest loss and filling of wetlands. This could be accomplished by reducing the number of lots/infrastructure within the forested area and removing the 3 lots that will require filling a small forested wetland. Providing a larger area of forested open space will not only minimize impacts to wildlife but could be a more desirable community amenity than the small, disconnected areas of open space that occur at the corner of lots or other 'left over' spaces within the development.*
- 2) It is recommended that indirect impacts to wetlands be minimized by providing a more ecologically sound upland buffer of at least 100 feet around all wetlands. Research indicates that an adequately sized buffer that effectively protects water quality is about 100 feet in width, but it should be recognized that some wildlife species require wider buffers during some portions of their life cycles. Lot lines, structures and infrastructure (roadways/stormwater areas etc.) should not be located within this buffer zone.*
- 3) If tree clearing occurs it will have the most impact on forest dependent wildlife during breeding and nesting periods. The most vulnerable time of year for most species of birds is April 1st to July 31st and clearing should not occur during this time. This clearing recommendation would only protect those species during one breeding season; because once trees are cleared the result is an overall loss of habitat.*

The filling of wetlands has been limited to roadway crossings. The current design concentrates preservation of woodland near the large wetland area and the Assawoman Canal. We anticipate tree clearing will be performed outside of the vulnerable dates listed.

Nuisance Waterfowl

- *Wet ponds created for stormwater management purposes may attract resident Canada geese and mute swans that will create a nuisance for community residents. High concentrations of waterfowl in ponds create water-quality problems, leave droppings on lawn and paved areas and can become aggressive during the nesting season. Short manicured lawns around ponds provide an attractive habitat for these species. We recommend native plantings, including tall grasses, wildflowers, shrubs, and trees at the edge and within an adequate buffer (15-30 feet in width) around the ponds (to be planted in accordance with the Sediment and Stormwater Plan approval agency requirements). When the view of the surrounding area from the pond is blocked, geese can't scan for predators and are less likely to reside and nest in the area of the pond.*
- *At this time, DNREC does not recommend using monofilament grids due to the potential for birds and other wildlife to become entangled if the grids are not properly installed and maintained. In addition, the on-going maintenance (removing entangled trash, etc.) may become a burden to the homeowners association or land manager.*
- *The Division of Fish and Wildlife does not provide goose control services, and if problems arise, residents or the home-owners association will have to accept the burden of dealing with these species (e.g., permit applications, costs, securing services of certified wildlife professionals). Solutions can be costly and labor intensive; however, with a reduction in the number of ponds, proper landscaping, monitoring, and other techniques, geese problems can be minimized.*

The developer is aware of the preferred methods for control of nuisance waterfowl.

Additional information on the Assawoman Canal Trail

- *The future Assawoman Canal Trail will be a great amenity for this community. Encroachments and 'social' trail development from the new development are inevitable. The Division of Parks and Recreation would like to work with the project designer to incorporate and plan a future pedestrian access from the proposed development to the Assawoman Canal Trail. For more information on the Assawoman Canal Trail please contact Bob Ehemann, Robert.Ehemann@state.de.us, 302-739-9241.*
- *It is recommended that future residents of this community are made aware of the Assawoman Canal Trail Project upon purchase of each dwelling.*
- *The clubhouse & recreation area with active recreation facilities are located in the corner of the parcel along Muddy Neck Road. If the purpose of these facilities is to provide quality recreation opportunities for the residents of Ocean View Beach Club, these facilities would serve the community better if they were in a more centralized*

location within the development. Relocating the clubhouse/recreation area would make the facilities easily accessible and increase the ability of residents to walk and bike to these facilities.

- *Additionally, the orientation of the tennis courts in the south east corner of the parcel pose a potential hazard to traffic along Muddy Neck Road. Though these courts will be fenced, it is not uncommon for tennis balls to be hit over the fence into surrounding areas (the road).*
- *Amenities such as bike racks and benches should be provided at the clubhouse & recreation area to encourage walking, biking and alternate transportation.*

We contacted Robert Ehemann of DNREC, Division of Parks and Recreation and coordinated a trail stub to accommodate a connection to the Assawoman Canal Trail. The recreational areas are more than sixty feet from roadway travel lanes and will be buffered with landscaping.

Additional information on hazardous substances

- *The Site Investigation and Remediation Section strongly recommends that the land owner perform environmental due diligence of the property by performing a Phase I Environmental Site Assessment (including a title search to identify environmental covenants) in accordance to Section 9105(c) (2) of the Delaware Hazardous Substance Cleanup Act (HSCA). While this is not a requirement under HSCA, it is good business practice and failure to do so will prevent a person from being able to qualify for a potential affirmative defense under Section 9105(c) (2) of HSCA.*
- *Additional remediation may be required if the project property or site is re-zoned.*
- *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). SIRB should also be contacted as soon as possible at 302-395-2600 for further instructions.*

A Phase I Environmental Site Assessment was performed. The demolition plan calls for remediation of hazardous substances in accordance with all local, state, and federal regulations.

Delaware State Housing Authority – Contact Karen Horton 739-4263

- *The Ocean View Beach Club proposal is located in a Level 2 Investment Area according to the 2010 State Strategies for Policies and Spending, and is also located in the coastal*

resort area of Sussex County. As such, DSHA supports this proposal as it will provide a variety of housing types in an area with close proximity to existing services, markets, and employment opportunities. While the price points are not known, for informational purposes, a household earning 100 percent of the area median income can only qualify for mortgages of \$224,000. Targeting some of the units to this price point or less would provide an excellent opportunity to support the local workforce in an area that lacks affordable homes.

The developer is aware of the housing opportunities for this project.

Department of Agriculture – Contact Scott Blaier 698-4529

- *The Delaware Department of Agriculture Forest Service encourages the developer to use the “Right Tree for the Right Place” for any design considerations. This concept allows for the proper placement of trees to increase property values in upwards of 25% of appraised value and will reduce heating and cooling costs on average by 20 to 35 dollars per month. In addition, a landscape design that encompasses this approach will avoid future maintenance cost to the property owner and ensure a lasting forest resource. To further support this concept the Delaware Forest Service does not recommend the planting of the following species due to the high risk of mortality from insects and disease:*

*Callery Pear Ash Trees
Leyland Cypress Red Oak (except for Willow Oak)*

If you would like to learn more about the potential problems or impacts associated with these trees, please contact the Delaware Forest Service for more information at (302) 698-4500.

Native Landscapes

- *The Delaware Department of Agriculture and the Delaware Forest Service encourages the developer to use native trees and shrubs to buffer the property from the adjacent land- use activities near this site. A properly designed forested buffer can create wildlife habitat corridors and improve air quality to the area by removing six to eight tons of carbon dioxide annually and will clean our rivers and creeks of storm-water run-off pollutants. To learn more about acceptable native trees and how to avoid plants considered invasive to our local landscapes, please contact the Delaware Department of Agriculture Plant Industry Section at (302) 698-4500.*

The proposed Landscape Plan incorporates native plantings and avoids vulnerable tree species.

Constance C. Holland, AICP
July 11, 2013
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The above comments serve as an official response from Davis, Bowen & Friedel, Inc. On behalf of our client, we thank you for your review. If you should have any questions or concerns please contact me at 302-424-1441.

Sincerely,
Davis, Bowen & Friedel, Inc.

A handwritten signature in cursive script, appearing to read "Terrence Scanlon".

Terrence Scanlon
Senior Designer

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Cc: Charles McMullen – Town of Ocean View