



STATE OF DELAWARE  
EXECUTIVE DEPARTMENT  
OFFICE OF STATE PLANNING COORDINATION

November 27, 2017

Mr. Roger Brickley  
4450 Summit Bridge Road  
Middletown, DE 19709

RE: PLUS review 2017-10-08; Grays Landing

Dear Roger,

Thank you for meeting with State agency planners on October 25, 2017 to discuss the proposed plans for the Grays Landing project. According to the information received, you are seeking review of a 38 unit subdivision on 72.9 acres along McCoy Road in New Castle 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 New Castle 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 38 residential units in an Investment Level 4 area according to the *2015 Strategies for State Policies and Spending*. Investment Level 4 indicates where State investments will support agricultural preservation, natural resource protection, and the continuation of the rural nature of these areas. New development activities and suburban development are not supported in Investment Level 4 areas. These areas are comprised of prime agricultural lands and environmentally sensitive wetlands and wildlife habitats, which should be, and in many cases have been preserved.

From a fiscal responsibility perspective, development of this site is likewise inappropriate. The cost of providing services to development in rural areas is an inefficient and wasteful use of the State's fiscal resources. The project as proposed will bring new residents to an area where the State has no plans to invest in infrastructure upgrades or additional services. These residents will need access to such services and infrastructure as schools and transportation. To provide some examples, the State government funds 100% of road maintenance and drainage improvements

for the transportation system, 100% of paratransit services, 90% of school transportation and up to 80% of school construction costs in the unincorporated portion of New Castle County where this development is proposed. Over the longer term, the unseen negative ramifications of this development will become even more evident as the community matures and the cost of maintaining infrastructure and providing services increases.

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

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

### **Code Requirements/Agency Permitting Requirements**

#### **Department of Transportation – Contact Bill Brockenbrough 760-2109**

- The site access on McCoy Road (New Castle Road 407) and the subdivision streets must be designed and built in accordance with DelDOT's Development Coordination Manual, which is available at <https://www.deldot.gov/Business/subdivisions/index.shtml?dc=changes>.
- 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 approximately 431 vehicle trip ends per day on weekdays and DelDOT concurs with that estimate and finds that the development would generate a maximum of about 45 vehicle trip ends per hour. Accordingly, DelDOT does not require a TIS. DelDOT's understanding of New Castle County's regulations in this regard is that they would not require a TIS either.
- Section 3.2.4.1 of the Manual addresses the placement of right-of-way monuments (markers) along subdivision streets. DelDOT will require that monuments be furnished and placed along the proposed streets in accordance with this section.
- As necessary, in accordance with Section 3.2.5 and Figure 3.2.5-a of the Manual, Section 3.2.4.2 of the Manual addresses the placement of right-of-way monuments (markers) along the road on which a property fronts, in this case McCoy 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.

- In accordance with Section 3.2.5 of the Manual, DelDOT will require dedication of right-of-way along the site's frontage on McCoy Road. By this regulation, this dedication is to provide a minimum of 30 feet of right-of-way from the right-of-way centerline. The following right-of-way dedication note is required, **"An X-foot wide right-of-way is hereby dedicated to the State of Delaware, as per this plat."**
- In accordance with Section 3.2.5.1.1 of the Manual, if this development is proposing a neighborhood sign/structure, then a permanent easement shall be established at the entrance. The easement shall be located outside of any existing and/or proposed right-of-way. It will also need to be verified that the sign/structure does not pose a sight distance and/or safety hazard.
- 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 McCoy Road. The location of the easement shall be outside the limits of the ultimate right-of-way. The easement area can be used as part of the open space calculation for the site. The following note is required, **"A 15-foot wide permanent easement is hereby established for the State of Delaware, as per this plat."**
- Referring to Section 3.4.2.1 of the Development Coordination 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 on McCoy Road within 300 feet of the proposed entrance.
  - Notes identifying the type of off-site improvements, agreements (signal, letter) contributions and when the off-site improvements are warranted. McCoy Road south of Kirkwood-St. Georges Road, in its present state, is inadequate relative to DelDOT's road design standards. Improvements will be necessary. DelDOT anticipates requiring a widening to provide two 11-foot lanes and an overlay.
- In accordance with Section 3.4 of the Manual, a record plan shall be prepared prior to issuing "Letter of No Objection". The following information will be required for the "Letter of No Objection" review:
  - Initial Stage Fee Calculation Form
  - Initial Stage Review Fee
  - Gate-Keeping Checklist – Site Plan
  - Design Checklist - Record Plan

- Sight Distance Spreadsheet
  - Owners and Engineers' name and e-mail address
  - Record Plan
  - Conceptual Entrance Plan
  - Submission of the Area-Wide Study Fee (If applicable)
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- 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 road for subdivisions.
  
  - As per the Delaware Strategies for State Policies and Spending, this development is in Investment Level 4. 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 if the project abuts to an existing facility. If the project does not abut an existing facility, and this one does not, it is at the Subdivision Engineer's discretion. No sidewalk or path is required along McCoy Road. No fee in lieu of construction will be required.
  
  - 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 McCoy Road.
  
  - Referring to Section 4.3 of the Development Coordination Manual, a subdivision street construction plan shall be prepared prior to issuing subdivision approval. The following information will be required for Construction Plan review:
    - Construction Stage Fee Calculation Form
    - Construction Review Fee
    - Gate-Keeping Checklist – Entrance Plan
    - Design Checklist - Entrance Plan
    - Auxiliary Lane Spreadsheet
    - Entrance Plan
    - Pipe/Angle Spreadsheet (If applicable)
    - SWM Report and Calculations (If applicable)
  
  - In accordance with Section 5.2.5.6 of the Manual, Turning Movement Diagrams 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 what auxiliary lanes are warranted at the site entrance 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 Development Coordination 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.
- 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**

**Executive Summary.**

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

With continued development in Investment Level 4 areas, the State will be limited in its ability to attain water and air quality goals. DNREC strongly supports new development in and around existing towns and municipalities and in areas designated as growth zones in certified Comprehensive Plans.

The development of this parcel will result in increased impervious surface and new sources of greenhouse gas emissions. Opportunities exist to reduce the environmental impact on-site through appropriate use of pollution control strategies and increased protections for the surrounding C&D Canal Wildlife Area. DNREC has outlined a number of best management practices to assist in protecting these resources and the overall health of the community. Waste

reduction and resource conservation measures will also improve the long term sustainability and future needs of the community.

The State of Delaware is threatened by climate change and has a goal of reducing greenhouse gas emissions by 30 percent by 2030. Appropriate development that provides access to public transportation, opportunities to walk and bike to shopping and recreation, and that employs energy efficient building standards are among key strategies to meet these goals. DNREC encourages the use of high performance building standards and consideration of alternative energy sources to promote clean sustainable energy and reduce greenhouse gas emissions. This could mean siting the buildings to take advantage of solar and geothermal systems, and/or including infrastructure for electric vehicle charging stations (funding assistance may be found at [www.de.gov/cleantransportation](http://www.de.gov/cleantransportation)). DNREC further recommends an abundant use of native vegetation and shade trees throughout the landscape, as well as pervious pavement and green infrastructure, where practicable, to absorb carbon dioxide, protect water quality and provide relief to residents on hot days.

#### **Water Quality: TMDLs.**

- The project is located in the greater Delaware River and Bay drainage area, specifically within the C & D Canal East watershed. In this watershed the State of Delaware has developed specific Total Maximum Daily Load (TMDL) pollutant reduction targets for nutrients (e.g., nitrogen, phosphorus); these target pollutant reductions have been developed under auspices of Section 303(d) of the Federal Clean Water Act. 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 C & D Canal East watershed calls for a 40 percent reduction in nitrogen and phosphorus from baseline conditions from the 2009-2011 baseline period. The specific TMDL nutrient and bacterial load reductions for the C & D Canal East watershed can be viewed here: <http://www.dnrec.delaware.gov/swc/wa/Pages/WatershedAssessmentTMDLs.aspx>
- A nutrient management plan is required under the *Delaware Nutrient Management Law (3 Del.C., 22)* for all persons or entities who apply nutrients to lands or areas of open space in excess of 10 acres. This project’s open space may exceed this 10-acre threshold. Please contact the Delaware Nutrient Management Program at (302) 739-4811 for further information concerning compliance requirements, or view additional information here: <http://dda.delaware.gov/nutrients/index.shtml>

#### **Water Supply.**

- The project information sheets state that individual on-site wells will be used to provide water for the proposed project. Our records indicate that the project is located within the public water service area granted to Artesian Water Company under Certificate of Public Convenience and Necessity 90-CPCN-01. DNREC recommends that the developer contact Artesian Water Company to determine the availability of public water. Any

public water utility providing water to the site must obtain a certificate of public convenience and necessity (CPCN) from the Public Service Commission. Information on CPCN's and the application process can be obtained by contacting the Public Service Commission at 302-736-7500.

- Should an on-site Industrial/Public well be needed, a minimum isolation distance of 150 feet is required between the well and any potential source of contamination, such as a septic tank and sewage disposal area, storm water management ponds, and it must also be located at least 150 ft. from the outermost boundaries of the project. The Division of Water Resources will consider applications for the construction of on-site wells provided the wells can be constructed and located in compliance with all requirements of the Regulations Governing the Construction and Use of Wells. A well construction permit must be obtained prior to constructing any wells.
- Should dewatering points be needed during any phase of construction, a dewatering well construction permit must be obtained from the Water Supply Section prior to construction of the well points. In addition, a water allocation permit will be needed if the pumping rate will exceed 50,000 gallons per day at any time during operation.
- All well permit applications must be prepared and signed by licensed water well contractors, and only licensed well drillers may construct the wells. Please factor in the necessary time for processing the well permit applications into the construction schedule. Dewatering well permit applications take approximately four weeks to process, which allows the necessary time for technical review and advertising. Should you have any questions concerning these comments, please contact Rick Rios at (302) 739-9944.

#### **Source Water Protection.**

- The DNREC Ground-Water Protection Branch (GPB) has reviewed the above referenced PLUS project and determined that a portion of the northeastern side of project falls within an area of excellent groundwater recharge. No wellhead protection areas were identified.
- Excellent Ground-Water Recharge Areas are those areas mapped by the Delaware Geological Survey where the first 20 feet of subsurface soils and geologic materials are exceptionally sandy. These soils are able to transmit water very quickly from the land surface to the water table. This map category (excellent) is an indicator of how fast contaminants will move and how much water may become contaminated (Butoryak and Talley, 1993). Land use activities or impervious cover on areas of excellent ground-water recharge potential may adversely affect ground water in these areas.
- GPB recommends referring to NCC Unified Development Code for regulations regarding development in these areas.

*Reference:*

Butoryak, K. R., and Talley, J. H., 1993, Delineation of Ground-Water Recharge Resource Protection Areas in the Coastal Plain of New Castle County, Delaware: Delaware Geological Survey Project Report for the Water Resources Agency for New Castle County, p. 26.

**Sediment and Erosion Control/Stormwater Management**

- A detailed sediment and stormwater plan will be required prior to any land disturbing activity taking place on the site. Contact the reviewing agency to schedule a pre-application meeting to discuss the sediment and erosion control and stormwater management components of the plan. The site topography, soils mapping, pre- and post-development runoff, and proposed method(s) and location(s) of stormwater management should be brought to the meeting for discussion. The plan review and approval as well as construction inspection will be coordinated through the New Castle County Department of Land Use Engineering Section. Contact the Department of Land Use at (302) 395-5470 for details regarding submittal requirements and fees.

**Air Quality.**

- The applicant shall comply with all applicable Delaware air quality regulations. Please note that the following construction-phase regulations in Table 1 – Potential Regulatory Requirements may apply to your project:

| <b>Table 1: Potential Regulatory Requirements</b>   |   |
|---|---|
| <b>Regulation</b>   | <b>Requirements</b>   |
| <b>7 DE Admin. Code 1106 - Particulate Emissions from Construction and Materials Handling</b> | <ul style="list-style-type: none"> <li>• Use dust suppressants and measures to prevent transport of dust off-site from material stockpile, material movement and use of unpaved roads.</li> <li>• Use covers on trucks that transport material to and from site to prevent visible emissions.</li> </ul>  |
| <b>7 DE Admin. Code 1144 – Control of Stationary Generator Emissions</b>                      | <ul style="list-style-type: none"> <li>• Ensure that emissions of nitrogen oxides (NO<sub>x</sub>), non-methane hydrocarbons (NMHC), particulate matter (PM), sulfur dioxide (SO<sub>2</sub>), carbon monoxide (CO), and carbon dioxide (CO<sub>2</sub>) from emergency generators meet the emissions limits established. (See section 3.2).</li> <li>• Maintain recordkeeping and reporting requirements.</li> </ul> |
| <b>7 DE Admin. Code 1145 – Excessive Idling of Heavy Duty Vehicles</b>                        | <ul style="list-style-type: none"> <li>• Restrict idling time for trucks and buses having a gross vehicle weight of over 8,500 pounds to no more than three minutes.</li> </ul>   |

For a complete listing of all Delaware applicable regulations, please look at our website: <http://www.awm.delaware.gov/AQM/Pages/AirRegulations.aspx>



### **Ground Water Discharges.**

- This project proposes individual on-site wastewater systems. A feasibility study was performed and approved in 8/14/08 however no site evaluations have been submitted, to date.

### **State Historic Preservation Office – Contact Terrence Burns 736-7404**

- We do not support any development or rezoning, for any proposed project in a Level-4 area. There are also some early or mid-20<sup>th</sup> century outbuildings (N05043) south of the parcel, just north of McCoy Road. If any project or development proceeds, be aware of the Unmarked Human Burials and Human Skeletal Remains Law.
- Prior to 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. There should be sufficient landscaping between the outbuildings and development, to block adverse noise or visual effects.
- Abandoned or unmarked family cemeteries are very common in the State of Delaware. They are usually in rural or open space areas, within or near the boundary, of a historic farm site. Even a marked cemetery can frequently have unmarked graves or burials outside of the known boundary line or limit. 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. If there is a discovery of any unmarked graves, burials or a cemetery, it is very costly to have them archaeologically excavated and the burials moved. The Division of Historical & Cultural Affairs recommends that owners and/or developers have a qualified archaeological consultant investigate their project area, to the full extent, to see if there is any unmarked cemetery, graves, or burial sites. In the event of such a discovery, the Division of Historical & Cultural Affairs also 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 you would like to see more information, please review the following websites: [www.history.delaware.gov/preservation/umhr.shtml](http://www.history.delaware.gov/preservation/umhr.shtml) and [www.history.delaware.gov/preservation/cemeteries.shtml](http://www.history.delaware.gov/preservation/cemeteries.shtml).

**Delaware State Fire Marshall's Office – Contact John Rudd 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:

**Fire Protection Water Requirements:**

- Since the dwellings of the subdivision are proposed to be served by individual on-site wells (No Central or Public Water System within 1000' of property), set back and separation requirements will apply.

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

**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: New Castle County