



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

August 21, 2012

Andrea Finerosky
234 North James Street
Newport, DE 19804

RE: PLUS review – 2012-07-04; Rockwood Parcel 1-C

Dear Ms. Finerosky:

Thank you for meeting with State agency planners on July 25, 2012 to discuss the proposed plans for the Rockwood parcel located south of Route 40 and east of Church Road in New Castle County.

According to the information received, you are seeking approval through the County for a new apartment building consisting of 90 dwelling units.

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 is located in Investment Level 1 according to the *Strategies for State Policies and Spending*. Investment Level 1 reflects areas that are already developed in an urban or suburban fashion, where infrastructure is existing or readily available, and where future redevelopment or infill projects are expected and encouraged by State policy.

Code Requirements/Agency Permitting Requirements

State Historic Preservation Office – Contact Terrence Burns 736-7404

- There are no known historic resources, such as archeological sites or National Registered listed properties on this parcel. However, if this proposed development or construction project proceeds the developer still needs to 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 either on or near a historic farm site, in 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 in reference to cemeteries, burial grounds or unmarked human remains, please go to the following websites for additional information: www.history.delaware.gov/preservation/umhr.shtml and www.history.delaware.gov/preservation/cemeteries.shtml.

Prior to any demolition, ground-disturbing or construction activity, the developer should consider hiring an archaeological consultant to examine the parcel for archaeological sites, such as a cemetery or unmarked human remains.

- 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.

Department of Transportation – Contact Bill Brockenbrough 760-2109

- The applicant has requested a waiver of New Castle County and DelDOT requirements that a Traffic Impact Study (TIS) be performed and the County has asked DelDOT for concurrence regarding some aspects of that request. Both the waiver request and the County reply cited Section 40.11.121(C) of the County’s Unified Development Code. Briefly, DelDOT believes a waiver may be appropriate, but not on that basis.

In a September 2, 2009, letter (copy attached) regarding a previous plan for Rockwood Parcel 1-A, we described how a waiver for that plan might be justified based on Section 40.11.121(B). That letter recommended that a Traffic Operational Analysis (TOA) be required and one was subsequently done. A copy of the review comments regarding that analysis, dated March 3, 2010, is also attached.

DelDOT found that the same rationale described in our 2009 letter is applicable to this plan and that a new TOA, while it would necessarily have new numbers, is unlikely to yield substantially different results. Accordingly, they believe that, in general, the recommendations in the 2010 letter can be applied to this plan as well. DelDOT’s 2010 letter did not mention improvements to Church Road from Wynnefield and Meridian Crossing to Delaware Route 71, which may be appropriate in that it concerned Parcel 1-A, which fronts on US Route 40, whereas this parcel fronts on Church Road. In the reply to New Castle County, DelDOT will consider this difference in location and may adjust the recommendations.

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

TMDLs

- The project is located in the greater Delaware River and Bay drainage, specifically within the C & D Canal and Red Lion Creek watersheds. In the Red Lion Creek watershed, the State of Delaware has developed specific Total Maximum Daily Load (TMDL) pollutant reduction targets for nutrients (e.g., nitrogen, phosphorus), and bacteria (under the 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 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 Red Lion Creek watershed calls for a 40 percent reduction in nitrogen and phosphorus from baseline conditions. The TMDL also calls for a 38 percent reduction in bacteria from baseline conditions. Although a TMDL has not been developed for the C&D Canal watershed to date, the existing TMDL developed for the Red Lion Creek will apply to the entirety of the project area.

Water Supply

- The project information sheets state water will be provided to the project by Artesian Water Company via a public water system. 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 85-WS-03.
- 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.
- Potential Contamination Sources exist in the area, and any well permit applications will undergo a detailed review that may increase turnaround time and may require site specific conditions/recommendations. In this case there is a Superfund site associated with the May B. Leasure Elementary School located within 1000 feet of the proposed project.

Water Resource Protection Areas

- The DNREC Ground-Water Protection Branch (GPB) has determined that a significant portion falls within an area of excellent groundwater recharge potential. In addition, the northwestern portion of the parcel falls within the Christina River Basin's Level 2 Water Resource Protection Area for New Castle County (See Map Below).



- 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 (Andres, 2004). Land use activities or impervious cover on areas of excellent ground-water recharge potential may adversely affect ground water in these areas.
- Level 2 Water Resource Protection Areas are the delineated watershed upstream from a surface water intake that supplies water to a drinking water system. Land Use or Land Activity within this area has the potential to influence water quality or quantity to the system.

Sediment and Stormwater Program

- A sediment and stormwater plan will be required for the site. 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 possible. 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. (Title 7, Delaware Code, Chapter 40 and Delaware Regulations, Title 7, Administrative Code, 5101)

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.

Air Quality

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

Table 1: Potential Regulatory Requirements	
Regulation	Requirements
7 DE Admin. Code 1106 - Particulate Emissions from Construction and Materials Handling	<ul style="list-style-type: none"> • Use dust suppressants and measures to prevent transport of dust off-site from material stockpile, material movement and use of unpaved roads. • Use covers on trucks that transport material to and from site to prevent visible emissions.
7 DE Admin. Code 1113 – Open Burning	<ul style="list-style-type: none"> • Prohibit open burns statewide during the Ozone Season from May 1-Sept. 30 each year. • Prohibit the burning of land clearing debris. • Prohibit the burning of trash or building materials/debris.
7 DE Admin. Code 1141 – Limiting Emissions of Volatile Organic Compounds from Consumer and Commercial Products	<ul style="list-style-type: none"> • Use structural/ paint coatings that are low in Volatile Organic Compounds. • Use covers on paint containers when paint containers are not in use.
7 DE Admin. Code 1144 – Control of Stationary Generator Emissions	<ul style="list-style-type: none"> • Ensure that emissions of nitrogen oxides (NO_x), non-methane hydrocarbons (NMHC), particulate matter (PM), sulfur dioxide (SO₂), carbon monoxide (CO), and carbon dioxide (CO₂) from

	<p>emergency generators meet the emissions limits established. (See section 3.2).</p> <ul style="list-style-type: none"> • Maintain recordkeeping and reporting requirements.
<p>7 DE Admin. Code 1145 – Excessive Idling of Heavy Duty Vehicles</p>	<ul style="list-style-type: none"> • Restrict idling time for trucks and buses having a gross vehicle weight of over 8,500 pounds to no more than three minutes.

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

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

- Please be advised that the Delaware Transit Corporation (DTC) may request the installation of a bus shelter at the existing bus stop on eastbound US Route 40 at Church Road. DTC anticipates commenting further comment in their review of the land development plan.
- DelDOT recommends that the applicant have their site engineer contact the Subdivision Manager for this part of New Castle County, Mr. Pao Lin, to discuss the requirements with regard to site and entrance plans. While DelDOT has no further comments on the plan presented here, they may have some as development of the plan progresses. Mr. Lin may be reached at (302) 760-2157.

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

Additional information on TMDLs and water quality

- A Pollution Control Strategy (PCS) is the regulatory directive requiring the implementation of various best management practices (BMPs) that help reduce transport of nutrient and bacterial pollutant runoff from all waters draining into a “greater” common watershed, with the ultimate objective of achieving the obligatory TMDL reduction requirements for that watershed. However, the PCS for the C&D Canal and Red Lion Creek watersheds have not been formally completed to date. In absence of a final PCS, the applicant is strongly urged to reduce nutrient and bacterial pollutants

through the voluntary commitment to the implementation of the following recommended BMPs:

- Plant additional native trees and /or native herbaceous cover to maintain open space, wherever possible.
- 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. It is strongly recommended that the applicant implement best management practices (BMPs) that reduce or mitigate some of its most likely adverse impacts. Reducing the amount of surface imperviousness via the application/use of pervious paving materials (“pervious pavers”) in lieu of asphalt or concrete in conjunction with an increase in forest cover preservation (or establishment of additional forest cover acreage) – are some examples of practical BMPs that could easily be implemented to help reduce surface imperviousness.
- DNREC recommends 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 bacteria pollutant runoff impacts from the constructed forms of surface imperviousness.
- The applicant is encouraged to 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 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. DNREC strongly encourages 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.

Additional information on hazardous waste

- There are two SIRS site with in a ½ miles radius of the property in question:
 - May Leisure Elementary School (DE-1088) is located adjacent to the north of the property. A Preliminary Environmental Assessment was completed in December of 1995 followed by a Phase I in January 1996. Additional soil sampling was conducted in September and October of 1996 to further evaluate metals in the soil. The site was entered into the Voluntary Clean-up Program (VCP) in March of 1997, and a Remedial Investigation was performed soon after. A Final Plan was approved in June of 1998. The Final Plan required that drinking water on site be restricted, a

Groundwater Management Zone (GMZ) be established and a farm well be sampled. The GMZ has not been issued to date. The GMZ will not impact the proposed project property and will only cover the SIRS Site. The site is currently undergoing Operations and Maintenance (O&M) activities.

- Parkway Gravel Site (DE-0086) is located 0.16 miles to the south of the property. A PA was performed in 1985 to determine if contaminants from another site were migrating to the property. It was concluded that there was no evidence of a release or contamination. All investigation procedures have ceased.
- DNREC 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 by the county.
- Should a release or imminent threat of a release of hazardous substances be discovered during the course of development (e.g., contaminated water or soil), construction activities should be discontinued immediately and DNREC should be notified at the 24-hour emergency number (800-662-8802). SIRS should also be contacted as soon as possible at 302-395-2600 for further instructions.

Additional information on air quality

- New homes may emit, or cause to be emitted, air contaminants into Delaware's air, which will negatively impact public health, safety and welfare. These negative impacts are attributable to:
 - Emissions that form ozone and fine particulate matter; two pollutants relative to which Delaware currently violates federal health-based air quality standards,
 - The emission of greenhouse gases which are associated with climate change, and
 - The emission of air toxics.
- Air emissions generated from new homes include emissions from the following activities:
 - Area sources such as painting, maintenance equipment and the use of consumer products like roof coatings and roof primers.
 - The generation of electricity needed to support the new homes, and
 - All transportation activity.

- Based on the information provided, the three air emissions components (i.e., area, electric power generation, and mobile sources) for this project were quantified. Table 2 – Projected Air Quality Emissions represents the actual impact the Rockwood Parcel 1C project may have on air quality.

Emissions Attributable to Rockwood Parcel 1C (Tons per Year)	Volatile Organic Compounds (VOC)	Nitrogen Oxides (NO _x)	Sulfur Dioxide (SO ₂)	Fine Particulate Matter (PM _{2.5})	Carbon Dioxide (CO ₂)
Area Source	2.8	0.3	0.3	0.3	11.3
Electric Power Generation	*	1.1	3.8	*	566.5
Mobile Source	4.1	4.3	0.1	0.0	2,660.0
Total Emissions	6.9	5.7	4.2	0.3	3,237.8

(*) Indicates data is not available.

- Note that emissions associated with the actual construction, including automobile and truck traffic from working in, or delivering products to the site, as well as site preparation, earth moving activities, road paving and other miscellaneous air emissions, are not reflected in the table above.
- DNREC encourages sustainable growth practices that:
 - Control sprawl;
 - Preserve rural and forested areas;
 - Identify conflicting land use priorities;
 - Encourage growth on previously developed sites and denser communities while at the same time protect our diminishing land base;
 - Coordinate transportation, housing, environment, and climate protection plans with land use plans; and
 - Demonstrate that communities can achieve the qualities of privacy, community, and contact with nature without degrading the natural environment or generating unacceptable environmental costs in terms of congestion, use of natural resources, or pollution.

- Additional measures may be taken to substantially reduce the air emissions identified above. These measures include:
 - **Constructing with only energy efficient products.** Energy Star qualified products are up to 30% more energy efficient. Savings come from building envelope upgrades, high performance windows, controlled air infiltration, upgraded heating and air conditioning systems, tight duct systems and upgraded water-heating equipment. Every percentage of energy efficiency translates into a percent reduction in pollution. The Energy Star Program is excellent way to save on energy costs and reduce air pollution.
 - **Offering geothermal and/or photo voltaic energy options.** These systems can significantly reduce emissions from electrical generation, and from the use of oil or gas heating equipment.
 - **Providing tie-ins to the nearest bike paths and links to any nearby mass transport system.** These measures can significantly reduce mobile source emissions. For every vehicle trip that is replaced by the use of a sidewalk, a bike path or mass transit, 7 pounds of VOC and 11.5 pounds of NO_x are reduced each year.
 - **Using retrofitted diesel engines during construction.** This includes equipment that are on-site as well as equipment used to transport materials to and from site.
 - **Using pre-painted/pre-coated flooring, cabinets, fencing, etc.** These measures can significantly reduce the emission of VOCs from typical architectural coating operations.
 - **Planting trees in vegetative buffer areas.** Trees reduce emissions by trapping dust particles and replenishing oxygen. Trees also reduce energy emissions by cooling during the summer and by providing wind breaks in the winter, whereby reducing air conditioning needs by up to 30 percent and saving 20 to 50 percent on fuel costs.
- This is a partial list, and there are additional things that can be done to reduce the impact of the development. The applicant should submit a plan to the DNREC Division of Air Quality which address the above listed measures, and that details all of the specific emission mitigation measures that will be incorporated into the Rockwood Parcel 1C project.

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

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

Sincerely,

A handwritten signature in cursive script that reads "Constance C. Holland". The signature is written in black ink and is positioned above the printed name and title.

Constance C. Holland, AICP

Director, Office of State Planning Coordination

CC: New Castle County