

March 29, 2005

Ms. Cynthia C. Nethem
Regulatory Services Coordination Office
Water Management Administration
Maryland Department of the Environment
1800 Washington Boulevard, Suite 430
Baltimore, Maryland 21230

Dear Ms. Nethem;

I am writing in reference to Mr. John Parlett's application (Pembroke LLC) for a non-tidal wetland permit (case number: 04-NT-0252/200463983). I have reviewed all the correspondence, the application, and plans for the Pembroke subdivision in the MDE file, and I urge the Maryland Department of the Environment to **deny** the permit requested in Mr. Parlett's application because of the potential for serious environmental damage. The Maryland Joint Permit application for Pembroke, submitted in June 2004 and subsequently revised, details a development and sanitary sewerage lines that will strongly and permanently impact Pembroke Run. The application not only underestimates the permanent impact to the stream and its wetlands, but also strongly deviates from requirements detailed in the St. Mary's County Comprehensive Land Use Ordinance.

Pembroke Run, its physical characteristics, and biological integrity have been studied by the Maryland Department of Natural Resources (2001), the U.S. Army Corps of Engineers (Brown, Center for Water Protection, 2001) and myself and colleagues in continuous studies since 1999 (Paul and Tanner; 2000, 2002, 2005). All studies concur that Pembroke Run has good biological integrity but is classified as "sensitive" by the Center for Watershed Protection and the Department of Natural Resources. All assessing agencies point to impervious surface development and soil compaction in Lexington Park as a major future concern for this watershed. Since these studies were conducted there have been major increases in impervious surfaces and watershed disruption upstream of the proposed development. Therefore, Pembroke Run is at greater risk of irreparable damage than it was in 2001.

The proposed Pembroke development is alarming because of the construction of the sanitary sewer/forcemain lines at the rear of the development (east of Willows Road) and running parallel to Pembroke Run for the entire length of the proposed subdivision. The construction drawings (Lorenzi, Dodds, and Gunnill, Inc., Plates 1 and 4-16) show that the sewerage lines themselves are within 10-15 feet of the stream channel in some places, that of construction would take place next to the stream channel itself with no buffer, and that clearing of riparian stream buffers would take place up to the stream channel. Plates 7-14 and 16, for example, show that the proposed sewage line itself is within 10 -15 feet

of Pembroke Run and its channel meanders. The sewage line is located and closest to the bank cutting side of Pembroke Run and that the stream channel will erode toward the sewage line over time. This very close proximity of the construction zone and final placement of the sewage lines will make it impossible to control sediments from construction zone, and the steep slopes adjacent to Pembroke Run's western bank will probably necessitate the use of heavy construction equipment in the stream channel itself. The damage to Pembroke Run from construction and very large sediment loads beginning deposited in its stream channel during construction cannot be classified as temporary buffer impact or temporary wetland impact (Plate 7, for example) because sediments will be imbedded in the channel, remain there, and not washed downstream. The impacts of imbedded sediments is permanent loss of benthic habitat, and in Pembroke Run this will occur along the entire length of project since construction upstream (Plate 16) is as close to the channel as it is downstream (Plate 7).

It is also unclear from the application how temporary impacts will be mitigated over time. It seems that the impacts are temporary because following construction there will no longer be any impact. There are many unanswered issues surrounding the temporary buffer and temporary wetland impact areas delineated on the plates:

- I believe that the impacts to Pembroke Run are vastly under-rated by Lorenzi, Dodds, and Gunnill.
- Presumably, there will restoration of the forced main sewerage construction site, but it not stated how this will take place.
- Does the deforestation due to construction in riparian buffer zones need replacement or are the forced main right-of-ways cleared and maintained without trees?
- What provisions are made in this plan to prevent erosion directly into Pembroke Run since virtually all the construction is on steep slopes above the stream for a distance of at least 5000 linear feet.

There are also many issues in the June 26, 2004, letter from Cynthia C. Nethen to Scott Burroughs that seem to have not been addressed. These include: point 2) cross-sectional areas of impacted zones, point 3) estimates of impacts, 4) information on the public need for this project.

Furthermore, it is unlikely that the Conditions of Corps Authorized Work Description and MDSPGP-2 provisions (A. General Requirements, C-Minimization of Environmental Impacts: 3 Work in Wetlands, 4. Temporary Fill and Mats, and 5. Erosion and Sediment Control) cannot be achieved or are unspecified in the MDE application (page 4 of the CENAB-OP-R-MDSPGP-2).

Finally there are many county regulations – County’s Comprehensive Zoning Ordinance (2001) –that cannot be met by the document/drawings submitted to MDE. For example the County specifies a 100 foot buffer around all waterbodies, and construction/disturbance cannot take place within 50 feet of the buffer- hence an effective distance of 150 feet. The plans show that disturbance is next to the stream and completely within the buffer.

St. May’s County requires avoidance of clear cutting on steep slopes, but this project is not in the RPD so forest clearing must be minimized. This is covered in Chapter 71, in general, and sections 71.3 and 71.4 of the County Ordinance, specifically. Clearing would be necessary to lay the sewer lines proposed in the document and these cuts would be on steep slopes.

FID (Forest Interior Dwelling) bird habitat may be an issue with this development. Fragmentation of forest cover – covered on page 71-10 of Comprehensive Ordinance and review of this requirement will be necessary.

Section 32.3 of the Comprehensive Plan requires specific set backs that are applied to lots. The lots at the rear of this proposed development are extremely close to Pembroke Run and the site plan could not be approved by LUGM if the lots are located this close to Pembroke Run.

Article 7 of the Comprehensive Plan deals with soils and soil types within 50 feet of the 100 foot stream buffer (page 71-7)- Site Development Standards for Erodible Soils. Subsections b. and g. apply to this project. Soil types need to be examined in this project and are not covered in the wetland application.

Finally, in order to understand the impact of this project on the wetlands and Pembroke Run the site engineering grading plan, the sediment erosion plan, and the storm water management plan would need to be reviewed and approved to meet compliance requirements.

In sum, this project represents a real danger to Pembroke Run and its ecological stability. Therefore, the permit application should be denied.

Sincerely yours,

Robert W. Paul, Ph.D.