

February 2, 2007

MEMORANDUM

To: Michele Donato, Esq. by email only

From: John A. Miller, P.E., CFM

**Re: Anthony Palagano
File Review, Lot 5 Section 1458, Tax Map #147
1709 NJ Route 33
Hamilton Township File Number 06-07-062
Princeton Hydro Project No. 683.003**

*Scientists, Engineers &
Environmental Planners
Designing Innovative
Solutions for Water,
Wetland and Soil
Resource Management*

Per Save Hamilton Open Space's direction, I performed a file review of the above application on January 31, 2007. The focus of my review was to prepare for the Planning Board meeting on **February 8, 2007**.

1. The applicant is represented by Richard Hamilton of Stark & Stark. Plans are dated June 26, 2006, last revised on December 21, 2006 by Princeton Junction. Remington Vernick has been selected by the Township to perform an engineering review of the project. On the date of my file review, there was nothing from the Township consultant.
2. Prior request for variance for impervious coverage relief withdrawn. They now say that they are at 59.95% (quantified as 52,642 square feet) which is a pinch lower than 60%. It is unclear how they measured this: if they included the shared driveway in the current Bisbee Avenue right-of-way and if they included Route 33 widening (SHOS concern).
3. The applicant has requested a waiver for soil testing and has submitted materials to show that the owner has previously removed an underground storage tank. Hamilton Township can not waive this requirement per ordinance I believe.
4. The plans clearly show a shared driveway with cross access easements. Richard Hamilton stresses in his January 16th letter (attached) that he wants this application to be treated independent of the adjacent application (deemed incomplete in January 2007). Hamilton states that his client "does not want to be a part of a much larger project by the neighbor and the potential delays that might develop from that larger plan."
5. Unlike what is shown on the plans for the adjacent parcel (File Number 06-07-066, that shows a shared stormwater management basin). In the adjacent application, Township staff commented that the "applicant should redesign the stormwater basin to preserve the first twenty (20) feet of trees (the minimum buffer to residential use) and an additional distance (yet to be determined) to preserve the critical root zone of these trees."
6. The trees to be removed are not shown on the landscape plan. One must look a multiple sheets to guess what is to be removed.

7. While an Operation and Maintenance Manual has been submitted with the application for stormwater management facilities, it is wholly deficient (especially with respect to being an infiltration basin) and the Township staff agrees. They state that the "Maintenance Plan is not complete or satisfactory." There is no Low Impact Development Checklist provided by the applicant's engineer.
8. The applicant did not submit electronic CAD files as required by ordinance. While the Township will likely waive this requirement until approval, our argument will be that we, as objectors, will want to verify the impervious coverage of 59.95% when the zoning district limit is 60%. We will want to OPRA the electronic file to do this. When there is no file, we are at a loss to verify compliance with the ordinance. I don't know if the Township staff can waive an ordinance submission requirement - doesn't that have to be the Board's decision?
9. There is no Letter of Interpretation submitted for the adjacent Square Properties tract. The LOI is significant with respect to the buffer requirements that could extend into the Bisbee Avenue and into this property.
10. From the reviewed material, there apparently has been no petition to the Township Council to vacate Bisbee Avenue. With the current application, this is a major open issue due to shared infrastructure in the current right-of-way. The file contains a statement by Township staff that the Township (I paraphrase) "has no interest in extending the stub street to Route 33." I asked the Township staff whether Bisbee was a Dedicated ROW or a Fee Simple purchase. Leon Weitz minimally searched and said that he thought it was Dedicated.
11. I did not see proof that an application has been filed with the Mercer County Planning Board.
12. We must hit them hard on the lack of an EIS. While the ordinance says that tracts less than 10 acres may be required to submit EIS documents, the critical nature of this site demands the Planning Board to require. The EIS must address: degradation of surface water quality, reduction of groundwater capabilities, vegetation destruction and disruption of wildlife habitats, to name a few specific requirements that are relevant to this site.

The important language in the ordinance follows that we must press:

"The board shall not approve any submission unless it determines and finds that the proposed development:

1. Will not result in appreciable harmful effects to the environment.
2. Has been designed and conceived with a view toward the protection of regional resources.
3. Will not place a disproportionate or excessive demand upon the total resources available for such proposal and for any future proposals.

13. The infiltration basin is located over ??? soils. It will be impossible to have an operating infiltration basin in this location. Sandra Myers, Princeton Hydro soil scientist has made observations..... (I need to coordinate with Sandra on her findings - but didn't want to wait to send this draft memo).

14. The Township staff has concern about basement flooding and degradation (not sure exactly what they mean by their use of “degradation”). They say the applicant must monitor groundwater movement and seasonal high water table and submit findings for records. This was declared outstanding (or incomplete).
15. The infiltration basin used a K-class determination for performance, what the applicant calls on-site soil testing in the Stormwater Management Report dated December 18, 2006. I think they will not be able to support the design function of the basin without on site testing. This is the same issue we dealt with before in Brick. The applicant’s engineer uses a soil infiltration rate of 10 in/hour.
16. The applicant’s engineer uses a composite analysis of impervious and pervious. This is not consistent with the BMP manual.
17. To squeeze in the basin, the applicant’s engineer uses gabion walls (cages filled with rock) to make the abrupt grade break from adjacent grade to the bottom of the basin. This is not consistent with the State Stormwater Rules (NJAC 7:8) and Township ordinance that requires a maximum 3:1 side slope.
18. There is no capacity analysis for the connection to the storm sewer downstream, a 18” diameter RCP at 0.92% where the new storm sewer ties into the existing. The applicant’s engineer must state “...that he has examined the drainage plan and found that the interests of the township and of neighboring properties are adequately protected...”
19. There is no pretreatment for the infiltration basin.