

EAST BRANDYWINE TOWNSHIP MUNICIPAL AUTHORITY
Tuesday, July 12, 2005
7:30 AM

Those in Attendance:

Michael Corbin, Chairman
Gerald Kirkpatrick, Vice-Chairman
Joseph Anthony, Secretary
Sandra Moser, Member

Also in Attendance:

Scott T. Piersol, Township Manager
Joseph Boldaz, Municipal Authority Engineer
Matthew T. VanLew, Roadmaster
Mary Beth Smedley, Secretary/Treasurer

Absent:

David Summers, Treasurer

The Municipal Authority met on Tuesday, July 12, 2005, in McCausland Hall. Mr. Corbin called the meeting to order at 7:30 AM.

Minutes: June 14, 2005

Mr. Corbin asked if there were any corrections or additions to the above minutes. There were none. Mrs. Moser made a motion to approve the June 14, 2005 minutes as presented. Mr. Kirkpatrick seconded the motion, with all voting Aye.

Treasurer's Report

Mrs. Smedley read the Treasurer's Report for July 2005. The Municipal Authority account balance as of July 8, 2005 was \$21,630.38. Mr. Anthony made a motion to approve the Treasurer's Report and authorize payment of the bills. Mr. Kirkpatrick seconded the motion, and the motion was approved by unanimous vote.

Mrs. Smedley stated that most of the Municipal Authority engineering bills and some of the Municipal Authority solicitor's bills are reimbursed by developers. Mr. Kirkpatrick asked if delinquent accounts were being paid, particularly in the case of one homeowner who was refinancing and had an Authority lien pending. Mrs. Smedley indicated that the Authority had not yet received a check from the refinancing company, but all paperwork was in place and that the Municipal Authority should be reimbursed at the time of refinancing.

Dilworth Tract

Mr. Jonathan Penders and Mr. Stephen Gallo approached the Municipal Authority to discuss Rouse/Chamberlin Homes' (the applicant) plans for sewage treatment on the Dilworth property. The property includes 71 acres on the western side of Dilworth Road, in the R-2 Zoning District. It has an existing barn and equipment shed. The parcel is bordered by the Hide-A-Way Farms subdivision and the Okie property to the north, the Cross Keys development to the west and the Clavier property and the East Brandywine Township Community Park to the south.

It is the applicant's intention to design the subdivision using the R-2 Cluster option. The plan currently shows 38 single family homes, including an estate lot, a considerable distance from Dilworth Road in order to protect the view shed. The common open space is the subject of a Conditional Use application. The Board of Supervisors will render their decision regarding this application at their July 20th Board of Supervisors meeting.

The plan proposes over 40% open space including 16.2 acres of private open space that will include the existing shed, barn, and future dwelling. The open space will be maintained by a Homeowners Association. The homes will be between 3,200 s.f. and 4,200 s.f. in size.

The applicant proposes to construct a community on-lot wastewater system with a centralized collection system followed by treatment and distributed disposal. There will be sewage disposal beds on site and it is planned to be an "association-wide facility" (the homeowners association would be the permittee). Mr. Penders went on to explain that oversight for this community system would lie with PADEP and the Municipal Authority. Some preliminary evaluation has been done on the site, but detailed analysis and more thorough testing will need to be done with a PADEP representative in attendance. Five separate areas of the parcel were evaluated; two of the areas were deemed unsuitable, based on the results of preliminary tests. The three remaining areas being considered for the sewage disposal beds include one or two primary and replacement areas. Area #1 that is central to the site could accept 2/3 of the flow, Area #2, near Dilworth Road could accept 1/3 of the flow and Area #3 in the western portion of the tract has the capability of accepting all of the flow. Mr. Penders won't be sure of the actual size or shape of the beds until further testing is complete.

Mr. Penders explained that the wastewater disposal concept included plans to construct a gravity system that would start near Lots #1 and #33 and drain near Elmwood Drive. The system would then go down Road A, go off the road near Court A and end at the treatment area near Lot #23. There will be a tank for flow equalization and then flows will go to a dosing pump. The elevation difference between the dosing pump and disposal Area #3 is approximately 45 feet. Separate beds may be dosed on different schedules.

There are 18 residential lots directly downgradient of a possible seepage bed if such a bed were constructed in Area #3. Mr. Penders stated that Area #3 is needed since it is the Municipal Authority's desire to have a replacement treatment bed system available for use if one of the other beds in the proposed subdivision were to fail. Preliminary testing to date included scrapes throughout the property to delineate marginal soils. Rouse Chamberlin Homes' consultant performed hand auguring around the base of the areas. The outcome of this preliminary testing led to the initial infiltration bed proposal, which was presented on maps to the Authority. Although none of the beds are within the proposed estate lot, there is nothing that prohibits the placement of a replacement infiltration/disposal bed within the lot. There would be a deed restriction that prohibits the placement of certain residential structures on the proposed estate lot.

Mr. Penders stated that in order to meet the desires to provide both a primary infiltration bed site and a replacement bed site, he needs 76 EDUs of wastewater disposal capacity (38 EDUs times 2). Areas #1 and #2 can be used at the primary site, and Area #3 the backup, or Area #3 could be used as the primary site and Areas #1 and #2 as backup.

The Municipal Authority asked that Mr. Boldaz look at what testing has been done so far. Mr. Penders will have his consultant contact Mr. Boldaz. The Municipal Authority also asked that the Rouse Chamberlin Homes' consultant look at areas on the estate lot that might be viable for a disposal bed. Since the Conditional Use decision isn't final, the Municipal Authority asked the Supervisors to restrict a portion of the common open space on the estate lot so that it could be used as a replacement bed.

Mr. Kirkpatrick asked if the contour shown on the plan would change very much. Mr. Penders said that the contours from the house and in the back of the lot would be graded. The contour change should be 10 to 15 feet at most.

It was suggested that Lots #24 and 25 be shifted in order to enlarge area #1. The Planning Commission wants to maintain the viewshed and this couldn't be done if the lots were shifted.

Mr. Penders hopes to get more direction at the August Municipal Authority meeting after Mr. Boldaz has had the opportunity to speak to Rouse Chamberlin's consultant. He hopes to begin preparation of the Planning Modules and continue testing on the site. He said that he would like to run this process parallel with the land development process.

Keats Glen Wastewater Treatment Facility Equipment Repair

Applied Water Management submitted a proposal for replacement of the existing mechanical mixers located in the anoxic compartment of the primary tank of the Keats Glen Wastewater Treatment Facility.

Currently, two of the three mixers are out of service. The cost to the Municipal Authority to replace two of the mixers would be approximately \$5,800.00.

Based upon the high costs for replacement of the broken equipment with exact replacements, Applied Water Management is presenting an alternative to the Authority, which would eliminate the mixers now located in the anoxic compartment and replace the mixers with diffused air. The air would be controlled by a transformer, timer and control solenoid valve that will set to open one to two minutes and then close for twenty minutes. These changes will not adversely affect the performance of the facility and will assure the plant's performance will meet all current NPDES permit limits.

It was thought that this change may require the Authority to amend its' existing NPDES permit now in effect. Dennis Murtagh from Applied Water Management recommends the Authority check with their engineers on the modifications as well as the possible permit change. Mr. Piersol checked with Municipal Authority Engineer Tom Brown who said that no permit changes were needed.

The scope of work for the diffused air alternative includes the following:

- Install a transformer and timer into the existing mixer disconnect panel.

- Install conduit from the existing modified panel to the outside control solenoid valve, which will be located under the safety grating in the anoxic compartment of the plant.
- Tap into the existing air line and install one drop diffuser constructed of Schedule 40 galvanized pipe, equipped with an isolation valve, disconnects, and a two foot sanitary diffuser.
- Change the drive pulley on blower drive to increase the air supply.
- Shut down the one existing mixer and remove it from operation. This mixer will be stored as a spare in the on-site control building.

The cost for parts and labor will be \$2,600.00.

Mr. Murtagh noted that the solenoid valve may need to be replaced every two to three years at a cost of \$200.00 to \$300.00. He also said that the Authority can expect to see a 15% to 20% reduction in the monthly electrical cost at the facility. There will probably also be a savings on mechanical repairs annually.

The Authority questioned why the mixer would fail so early. Mr. VanLew said that in his discussions with representatives of Applied Water they said the equipment wasn't of the highest quality to begin with and that original equipment replacement parts were hard to find (they were manufactured by a foreign firm and lead time for delivery of a replacement mixer was lengthy). The Authority asked Mr. Boldaz to see if any of this equipment is still under warranty. He will look into this, but doesn't think so.

Applied Water Management sends in the required Discharge Monitoring Reports to PADEP on a monthly basis. Since PADEP is evaluating the possible approval of other Purestream treatment plants, it is important that we provide them with feedback on equipment failures and system performance.

Mr. Anthony made a motion to proceed with the scope of work outlined in Applied Water Management's letter of July 5, 2005. Mrs. Moser seconded the motion, with all voting Aye.

The Authority commended Applied Water for being proactive in operation and maintenance of the plant and for their continued communications with the Authority. The Authority thanked both Applied Water and their predecessor, Clean Waters for their professionalism and for being instrumental in bringing the treatment plant back into compliance.

Overlook Road Farm

The applicant is proposing to build a combination of single family homes, carriage homes, and townhouses for a total of 655 units on both the north and south side of East Reeceville Road. The plan also shows an 18-hole Jack Nicholas-designed golf course with a clubhouse. The property encompasses approximately 621.74 acres of land, comprised of 307.58 acres north of East Reeceville Road and 314.16 acres south of East Reeceville Road. The southern portion is a 310 acre tract located in the R-2 Zoning district and proposes single family homes on individual lots and approximately half of the golf course. The portion of the property north of East Reeceville Road was part of a settlement agreement that concluded in April of 2004. The applicant

submitted a subdivision plan for the south side of East Reeceville Road based on the requirements of the R-2 Zoning District and was granted preliminary plan approval in March of 2004.

The site historically consists of a total of four farms and is divided into two tracts designated the "North Tract" (north of East Reeceville Road) and the "South Tract" (south of East Reeceville Road). On the "North Tract" are the Henry Steward and William Moore farms and on the South Tract are the William Davis and Charles Trego Farms. The site contains various farmhouses, dwellings, barns and miscellaneous outbuildings. The remainder of the site contains the Beaver Creek Dam and its lake, open farmland, steep slopes, wooded areas, wetlands, creeks and a network of farm roads. The Beaver Creek Dam and lake are within an easement of the Chester County Water Resources Authority and will be retained by them. The plan proposes to preserve and relocate the William Moore farm farmhouse and barn, and preserve the Charles Trego farmhouse. All other structures are to be razed.

The "North Tract" is being reviewed under the "Clustered Residential Development" regulations of the R-3 Residential Zoning District in conjunction with the Settlement Agreement dated April 1, 2004. The "South Tract" is being reviewed under the "Clustered Residential Development" regulation of the R-2 Residential Zoning District. The project is proposed to be constructed in five phases.

Ray Grochowski and Tony Sabatini from Pulte Homes, Theresa Lemley, Esq. from Riley, Riper, Hollin and Colagregco, and Fred Ebert from Ebert Engineering, Inc. attended the meeting on behalf of Pulte Homes.

Mr. Grochowski stated that he wanted to provide the Authority with an update on the treatment plant and wanted to discuss Mr. Boldaz's review letter of the Sewage Facilities Planning Module, and the proposed Operating Agreement. The Municipal planning agency has 60 days to comment on the planning module. He said that all of the exhibits have not been attached and can be reviewed at a later date. Once all outstanding issues are satisfied he would like a letter of concurrence from the Authority. Mr. Grochowski said he wouldn't take the Planning Module to the Board of Supervisors until it is satisfactory to Mr. Boldaz, the Municipal Authority and Planning Commission.

Mr. Fred Ebert stated that after last month's meeting he sat down with Joe Boldaz to revise the wastewater treatment plant plans. He said he has moved the treatment plant building further away from existing homes, and has redesigned the building layout to house the treatment facility. The reactor and tertiary treatment system will be housed in a barn-like structure which will also be used for equipment storage. The control building will be two stories so that it includes space for future expansion. This building will look like a farmhouse. The proposed driveway has also been extended to allow for future treatment system expansion. A silo will hold waste sludge for storage prior to off-site disposal. This silo will meet the maximum 35 foot height requirement as outlined in the Township's zoning ordinance. Pulte Homes is proposing to house the various facilities in multiple buildings to make it look like a farm complex with a farmhouse, large barn and silo.

The proposed site plan shows the overall layout of the wastewater treatment plant and associated structures. The sludge holding tank (silo) will be covered to minimize odors and to remove the explosion proof requirements for the treatment building. The influent equalization tank, sludge holding tank and possibly the influent screen structure will be connected to an odor control system consisting of a negative air system with activated carbon. There are no tanks under the control building, and blowers have been removed from the control building.

At last month's meeting, Mr. Grochowski submitted pictures of a similar wastewater treatment facility in Springfield Township, York County, which is a 700,000 gallons per day Sequencing Batch Reactor (SBR). Mr. Boldaz will schedule a time when the Municipal Authority can tour that plant.

The currently-proposed Pulte facility is 300,000 gallons per day, but the facility will be three times larger than the Springfield Township facility and, therefore, for practical reasons, will be too large to house in one building. The SBR tanks and blower room will be located in a large barn; the office, lab and UV disinfection will be located in a farmhouse control building; the waste sludge holding tank will be located in a silo. There will be an overhead crane in the barn for equipment access. The proposed layout is intended to keep the generator noise and any potential odors as far away from the residential houses and as close to the effluent lagoons as possible. A ten to twelve foot earthen berm will be constructed along the rear of the facility to screen it from the currently designed golf course fairway.

Since the homes are designed to be relatively close to the plant, odor control will be very important. Mr. Ebert said that proper treatment is important to control odors. An activated carbon system will be installed that can run continuously although Mr. Ebert doesn't think it will have to run all of the time. He was asked how much carbon is needed but he wasn't sure. The sewage collection system is being designed to prevent the potential for hydrogen sulfide time to form.

It isn't expected that a full-time operator will be needed to run the treatment plant. Mr. Ebert expects an operator to be on site approximately two hours a day, 6 days a week, one day a week for four hours, and an entire day once each month. The treatment facility could be used as a home base for a contract operator who would be overseeing other treatment plants in the Township.

Outdoor lighting will be minimized and designed so it doesn't cause a distraction for neighboring properties. Mr. Grochowski said that lantern type lights might be installed along the driveway.

Sludge from the silo will be moved into trucks via gravity. The trucks will also have vacuum capability. Mr. Ebert expected that initially sludge would be removed once every three weeks.

Mr. Grochowski stated that a draft Agreement for Construction and Operation of the Community Sewage Facilities was provided to Messrs. Halsted, Spangler and Boldaz for their review and comments. The Municipal Authority hopes to have those comments prior to the next meeting. Mr. Grochowski stated that the date on the plans and specifications should match the date used in the settlement agreement so there isn't confusion with PADEP.

Mr. Grochowski and the Authority discussed the conditions needed to start up the plant and how they will have the necessary flow when the plant goes online.

A revised Planning Module package will be submitted to Mr. Boldaz within a week so he can provide comments by July 28th.

Brandywine Wallace Elementary School

Mrs. Smedley was asked if the Public Utility Commission contacted the Township or Municipal Authority regarding the letter sent from the Township and Municipal Authority to the PUC objecting to the Application of Aqua Pennsylvania, Inc. for approval to furnish and supply water service to the Brandywine Wallace School. To date, the PUC hasn't made contact with the Township.

The Authority asked Mr. Piersol to review our Sewer Ordinance to determine if commercial properties such as a school are billed differently than residences for sewage treatment.

Connections to the Guthriesville Sewage Collection System

Mr. Piersol provided the Municipal Authority with an update on sewer connections within the Guthriesville Sewer District.

Nancy Frame of the County Housing Partnership Program advised Mr. Piersol that the County Commissioners recently changed the income limits for their Senior Citizen Maintenance Program. Mr. Piersol advised each of the pending applicants to contact Mrs. Frame to discuss whether this change will have any impact on their pending applications. Mrs. Frame also indicated that she would place a top priority on the Murdaugh application if they apply. Mr. Murdaugh did not attend the September 29th public meeting, but was advised to submit this application on behalf of his mother. Mrs. Frame will contact Mr. Piersol if the Murdaugh family makes contact with her office.

Mr. Piersol received an e-mail from Chester Pogorelski of the USDA Rural Development Program to discuss their Rural 504 Loan and Grant Program. The eligible area for this program was expanded earlier this spring to include areas of the Township east of the Hopewell/Bondsville Road intersection.

We have submitted a request for payment of the \$10,000 DCED grant from Harrisburg. These funds will be used to underwrite a portion of the lateral connection cost for the senior citizens, and possibly reduce the connection fees for others by a lesser amount.

Mr. Robert Zynn has asked for an exemption for his small office building since it is used infrequently. He would like the Authority's consideration in determining whether he uses less than 1 EDU.

East Brandywine Township Municipal Authority

July 12, 2005

Page 8

Other Business

The Municipal Authority offered their condolences to the Kessler family on the death of East Brandywine Township Historic Commission Chairman John Kessler.

The Municipal Authority sent their condolences to Mr. Summers' on the death of his mother.

Adjournment

There being no further business, Mr. Anthony moved to adjourn the meeting at 9:30 AM. Mrs. Moser seconded the motion, and the motion was approved by unanimous vote.

Respectfully submitted,

Mary Beth Smedley
Secretary/Treasurer
East Brandywine Township