

TOWNSHIP OF LOWER MAKEFIELD
PLANNING COMMISSION
MINUTES – MAY 19, 2020

The regular meeting of the Planning Commission of the Township of Lower Makefield was held remotely on May 19, 2020. Mr. Bryson called the meeting to order at 6:07 p.m.

Those present:

Planning Commission: Craig Bryson, Chair
Ross Bruch, Vice Chair
Tony Bush, Secretary
Adrian Costello, Member
Dawn Stern, Member

Others: James Majewski, Director Planning & Zoning
Barbara Kirk, Township Solicitor
Andrew Pockl, Township Engineer
Frederic K. Weiss, Supervisor Liaison

APPROVAL OF MINUTES

Mr. Costello moved, Mr. Bruch seconded and it was unanimously carried to approve the Minutes of March 9, 2020 as written.

#675 – PENNSYLVANIA AMERICAN WATER COMPANY
EDGEWOOD ROAD WATER TREATMENT FACILITY EXPANSION – AMENDED FINAL LAND
DEVELOPMENT PLAN
Tax Parcel 20-034-044-001 & 20-034-045-002
R-2 Residential Medium Density Zoning District
1145 Edgewood Road

Mr. Bryson stated the Planning Commission received a review letter with responses on this matter.

Mr. Roger Phillips, project engineer, was present. He stated they were before the Planning Commission some months ago for this project with regard to the Zoning relief. The project involves disinfection improvements to the treatment plant across the street from the Township Building. He stated they received approval from the Zoning Hearing Board for the Special Exception and the impervious surface.

Mr. Phillips showed a slide of the existing site. He stated the upgrades include disinfection carbon feed and storage, UV disinfection, and a conversion from chlorine gas for the disinfection. He noted the areas shown in green which are the parts of the building involved as well as the expansion to the driveway. He stated what is proposed is a minor expansion on the site including the small driveway expansion, contact tanks, and a sludge holding tank.

Mr. Phillips showed a slide of the overall plan of the site showing where the expansions will be. He noted an area where there are two underground stormwater detention and infiltration beds. He stated they meet the Township's Stormwater Ordinance requirements.

Mr. Phillips stated they did receive the review letter, and he feels it is a clean letter.

Mr. Bryson stated up to Section 4 of the letter they are all technical comments, and he asked Mr. Pockl if he is satisfied up until the Waivers. Mr. Pockl stated he is. He stated he understands that there was a question regarding the buffer from the owner of the Residential property located to the northeast of the site. Mr. Pockl stated there was some encroachment within the yard setback and some plantings; and in talking with the resident, the resident preferred to have a 6' high white vinyl fence as opposed to more trees being planted to screen his property. He stated this will be put into an Agreement.

Mr. Bryson stated the requested Waivers seem to be standard having to do with sheet sizes and amounts, and he would be in favor of these Waivers since it cuts down on the amount of paper.

Mr. Bryson asked if any neighbors came to the Zoning Hearing Board meeting when this was discussed, and Mr. Majewski stated no neighbors came to the meeting.

Ms. Stern asked to be shown the list of the Waivers being requested, and this was shown by Mr. Phillips. Mr. Bryson stated this will basically just cut down on the amount of paper that has to be submitted. The Planning Commission was in favor of the Waivers being granted.

Mr. Bush asked if all other issues have been satisfied which were raised at the last meeting. Mr. Phillips stated they did a re-submission about six weeks ago and went through the full review process again, and he feels they addressed all the items that were in the original review letter. Mr. Bryson stated the most recent letter indicates that the items have been satisfied. Mr. Pockl stated his latest review letter was dated April 21, 2020 which was subsequent to the initial submission and the last Planning Commission meeting.

Mr. Bush moved, Mr. Bruch seconded and it was unanimously carried to recommend to the Board of Supervisors approval of the Plans last revised 4/8/20 subject to requirements set forth in the Township engineer's review letter. The Planning Commission recommends approval of the requested Waivers.

#676 – HARBISON - 2 LOT SUBDIVISION – INFORMAL SKETCH PLAN
Tax Parcel 20-016-095-001
R-2 Residential Medium Density Zoning District
775 Sandy Run Road

Mr. Majewski stated this Application is a Sketch Plan for a two-Lot Subdivision on Sandy Run Road. He stated they are proposing to subdivide the Lot in half to create one new building Lot.

Mr. John Richardson, Dumack Engineering, was present representing Mr. Tom Harbison who owns this three acre Lot on Sandy Run Road, north of Edgewood Road and south of Reading Avenue. Mr. Richardson stated he would like to subdivide the Lot into two Lots. He stated the existing home is located on the southern side of the Lot so they are able to divide the Lot approximately down the middle and provide one additional single-family Lot.

Mr. Richardson stated the Lot is approximately three acres. After right-of-way, they have 2.8 acres gross for the entire Lot. He stated they lose 1.7 acres for resource protection areas, and that results in a net Lot area of 1.1 acres which they would divide almost in half.

A slide of the existing Lot was shown, and Mr. Richardson showed the location of the existing home on the southern portion. He stated the property fronts on Sandy Run Road. He stated there is a significant drop off down to Brock Creek which runs through the property. Mr. Richardson stated his client has lived here

“for quite a while, and he is kind of elderly.” Mr. Richardson stated his client wanted to get the “feel of the Township” before going through a formal submission since if there was going to be significant resistance from the Township, he was not interested in moving forward; although he would like to do the Subdivision if the Township feels it would be generally favorable.

Mr. Richardson showed a slide of the proposed Subdivision which will divide the Lot approximately in half, and there would be one additional single-family residence at the north end of the property. He stated they are trying to keep it forward of the slope so it is tight to the setbacks.

Mr. Richardson stated one Variance would be required as the Zoning Ordinance requires that the setbacks not be measured from the Lot lines but from the limits of the natural resources. He stated due to the slopes behind the existing house and the proposed house and the creek, they would not be able to meet that, and there is no envelope available if you maintain the setbacks from the resource protection. He stated they would request a Variance so that they could measure the setbacks from the Lot lines. Mr. Richardson stated they would maintain the setbacks from Brock Creek, and they would not be asking for that Variance.

Mr. Richardson stated the Ordinance is a little unclear, and he believes it may be a mathematical error with regard to calculating maximum density. He stated he believes that they are in conformance with that, and he will discuss this further with Mr. Majewski.

Mr. Pockl asked if there are wetlands in the area; and Mr. Richardson stated while they do not believe so, they have not had a wetlands study done. He stated he has been on the site in winter, and it did not appear to be wetlands.

The Existing Conditions Plan was shown, and Mr. Richardson showed the steep slopes in the gray, hatched area adding that the darker the hatch, the more severe the slope. He stated there is a band through the middle of the site where it slopes down to the creek. He stated the creek traverses the site from north to south. He stated they would provide any required buffers to the creek. He stated they are trying to keep the house in the most usable portion of the Subdivided Lot out by the street.

Mr. Bryson stated even if they were able to get the property subdivided, the client should understand the value of the land compared to what would need to be done in order to meet the Codes. He stated the cost to do this and be able to build something may not be financially worth it to the Applicant. Mr. Richardson stated he feels that is one of the reasons why his client is approaching this cautiously, and he wanted to get the feelings of the Township first. Mr. Bryson stated his concern is that what they may be left with to be able to build on and the value of the Lot could be an issue.

Mr. Bryson asked how many trees would need to be taken down. Mr. Richardson stated they do not have a tree count although they feel they would be in compliance with woodland disturbance. Mr. Bryson stated there is a requirement to replace any trees taken down. He stated he feels this project will be tight, and he is not sure what the financial return would be to develop this corner of the Lot.

Mr. Richardson stated his client has not shared with him his plan as to whether he wants to develop it, sell it as an empty, buildable Lot, or give it to one of his children.

Ms. Kirk stated if he plans to go forward with the Subdivision, and he needs to get Zoning relief, she is not sure how the Zoning Hearing Board would feel about giving a Variance that was the result of the Applicant's actions to Subdivide.

Mr. Bryson stated while it is possible they could meet all the requirements, obtain the Variances, and satisfy the Township engineer with regard to stormwater management, he would still be concerned about how much that will cost for a financial return to the Applicant.

Mr. Majewski stated if they are not going to be connecting to public sewer, they would need to show where the proposed septic system would go; and they would need to verify that they meet all the applicable separation distances to adjoining wells and septic systems. He stated for public water, there is a 12" main in front of the site, but he is not sure that PA American would allow them to connect to that 12" main as it may be a transmission main. Mr. Majewski stated the Applicant would need to verify this with PA American. He also stated if they plan to put in a well, they need to verify that the well will meet the separation distances from adjoining septic systems and the septic system that they are proposing.

Mr. Richardson stated he was unaware of the potential of not being able to tap into the main out in Sandy Run Road. He stated their intention was to connect to public water and sewer. He stated with regard to the sewer it appears that the terminal line for the sewer is approximately 100' south of their property, but they are still trying to verify that.

Mr. Bryson asked if the existing house is on the public sewer system, and Mr. Richardson stated he believes that the existing house is private. Mr. Bryson stated he assumes that if they are going to tap into the public system for the new home, they would want to do that as well for the existing home; and Mr. Richardson stated that would be his recommendation. Mr. Majewski stated that would be a requirement.

Mr. Majewski stated the sewer line would be to the north or the top of the screen, and Mr. Richardson agreed.

Mr. Bryson asked if Mr. Pockl has written a review letter for this Sketch Plan, and Mr. Majewski stated the Applicant did not request an engineering review for this Informal Sketch Plan. Mr. Richardson stated his client is trying to be cautious as to how he is approaching this. Mr. Bryson stated he feels it will be expensive to develop this, and he does not feel the Applicant would be able to recapture that expense. Mr. Bryson suggested that Mr. Richardson provide his client a list of expected expenditures including cost of tree replacement, utilities, and the other issues they discussed this evening.

Mr. Bryson asked if there is a requirement for a sidewalk, and Mr. Richardson stated he feels curb and sidewalks would be required. Mr. Majewski stated there is curb in front of the property. He stated sidewalk would also be required or they would have to request a Waiver or pay a Fee-in-Lieu.

Mr. Bryson stated the next step would be to get this before the Township engineer for his formalized comments. He stated he would "cautiously recommend that they do their homeowner before they proceed."

PRESENTATION ON LOWER MAKEFIELD STORMWATER MS4 PROGRAM

Mr. Pockl stated it is a requirement of the Township's MS4 Permit to have this presentation. He stated the Permit allows the Township to discharge stormwater into Waters of the Commonwealth and ultimately Federal waters.

Mr. Pockl stated the presentation is geared toward residents with helpful hints on what homeowners can do to improve water quality and stormwater run-off on their property.

Mr. Pockl stated they recommend going through a process to achieve the best results. He stated Step 1 would be to evaluate the property. Step 2 is to choose the improvement method which would have the most benefit or is the most economical. Step 3 is to determine if Township Permits are needed. Step 4 is to construct the project, and Step 5 is operations and maintenance since this is a life-long improvement of which operations and maintenance is an important part.

Mr. Pockl stated in order to evaluate the property, you can create simple Sketch Plan showing all impervious areas, trees, the grade of the property, showing which way water flows, and which way the surface water run-off to the street. Mr. Pockl showed a sample Sketch Plan. He stated the idea is to treat the water from the impervious areas and move it toward pervious areas. He stated impervious areas would be driveways, roofs, walkways, patios, the coping around a pool, sheds, and other accessory buildings. He stated pervious areas would be lawn/grass, trees, etc. He stated the idea is to take the stormwater run-off from the impervious areas and move it toward the pervious areas before it gets out into the street, into the storm inlets, and down to the streams.

Mr. Pockl stated the addition of impervious area requires a Permit. He stated over 1,000 square feet of new impervious area needs a Stormwater Plan. He stated up to 5,000 square feet of new impervious is exempt from peak rate control which means that you do not have to control the rate at which the stormwater run-off comes off the property to what it was before the installation of the new impervious area, but you do have to implement volume controls and reduce the amount of volume that comes off the property. He stated a calculation is provided which would equal the cubic feet of water that needs to be controlled, and is considered the two-year storm difference. He stated 2,000 square feet of earth disturbance requires Erosion and Sediment Control review from the Bucks County Conservation District. He stated over 5,000 square feet of new impervious area or new homes require control of peak rate of run-off to less than pre-existing conditions. He stated if you have less than 5,000 square feet, you do not need peak rate control; but if you are over 5,000 square feet, you do. He stated that would involve a Stormwater Management Study where you analyze the rate at which stormwater runs off your property in

the existing condition and then analyze in the proposed condition, and you have to control the rate of run-off to what it was before development. Mr. Pockl stated an Operations and Maintenance Agreement for all BMPs would be required. Mr. Pockl stated Best Management Practices generally fall into two areas – one of which is non-structural BMPs; and that would be the use of existing site features and conditions to treat, prevent, or reduce the negative effects of stormwater run-off. He stated the other is structural BMPs; and these would be vegetative or constructed improvements that are used to reduce the negative effects of stormwater run-off.

Mr. Pockl stated some examples of non-structural BMPs would be tree planting, open space preservation, soil amendments, roof drain disconnection, and pollution prevention. He stated with regard to tree planting native species should be used. He stated the Township's Subdivision and Land Development Ordinance has a list of the native species permitted to be planted in the Township including evergreen, ornamental, and street trees, shrubs, perennials, and grasses. He stated it is also important to look at where utilities and overhead wires are when deciding where to plant. He stated roots could compromise the stability of the utilities or the vitality of the tree. He stated sun and wind should also be considered depending on the plantings. He showed a slide of where various sized trees should be planted in relation to the home.

Mr. Pockl stated with regard to open space preservation that would include cluster development and the protection of natural features. He showed a photo on the lower left of the slide where there is a streambank that has eroded significantly. He stated if you have a property along a stream or an open vegetative channel that carries stormwater run-off, the number one way you can improve stormwater quality throughout the Township is to make sure that the banks of the stream or drainage channel are not being eroded. He stated there are various techniques to protect that including boulders and tree roots to stabilize the bank. He stated DEP has indicated that the number one way to help improve water quality is to protect the stream-banks.

Mr. Pockl showed a slide related to cluster development which is a good use of open space preservation when there is not a large Lot, and the slide shows that the homeowner put the storage shed beneath a deck as opposed to having it separate in the rear yard and creating more impervious area where it may not necessarily be needed.

Mr. Pockl stated other non-structural BMPs include roof drain and sump pump disconnection. He showed a slide where there are roof drain extenders which extend the roof to drain water out over the grass area which allows it to infiltrate into the ground. He stated if the water would get into the storm sewer, it would go at a cooler temperature than it would if it were directed down the driveway and out into the street into the sewer inlets.

Mr. Pockl stated if you have a roof drain, you should always use splash pads which he showed on the right of the slide as that controls erosion.

Mr. Pockl stated with regard to pollution prevention this involves properly disposing of animal waste and the use of natural herbicides and pesticides. He stated another way is mindful vehicle maintenance, and if you are changing the oil in your car in the driveway, you need to capture that. He stated if you are washing your car, it should be done in a grass area so that water has time to slow down and does not get directly discharged into the inlet in the street. Mr. Pockl stated it is also important to be mindful of septic maintenance as well so that there is not a potential for an overflow which would compromise the groundwater.

Mr. Pockl stated some examples of Best Management Practices, structural BMPs, would be an infiltration trench/dry well/seepage bed, rain gardens, porous paving, rain barrels, and stormwater basins which are usually reserved for regional developments or when you are developing multiple Residential properties.

Mr. Pockl stated with regard to an infiltration trench you would use open stone and a separation fabric which is buried underground. He stated the water would get into the perforated pipe which distributes it into the open spaces underneath the ground and allows it the time to infiltrate into the ground and replenish the ground water table. He stated you can typically connect roof drains underground directly to the infiltration trench; however, you would need to have something that collects sediment prior to it going into the infiltration trench. He stated you do not want sediment getting into the perforated pipe and clogging it up because that creates a maintenance issue which involves digging it up and replacing it. Mr. Pockl stated an infiltration trench would need to be located away and downgrade from basements, and typically 10' is an adequate distance. He stated you want to make sure that the water that is being put back into the ground does not come into the basement.

Mr. Pockl stated rain gardens are surface areas that collect water for a period of time before overflowing and getting into the stream or the storm sewer. He stated there are native plantings that are tolerant of water. He stated rain gardens are mainly used for improving water quality and not as much for improving the rate of run-off or flood control. He stated they are excellent for water quality. He stated they typically need an overland flow area or a spillway, and you do not want to have a situation where you are building a berm to retain water in the rain garden, and then the water backs up and gets to the house. He stated a rain garden should be located in an area where there is an opportunity, if it does fill up, to spill overland over a grass area and get the water away from the home. He stated typically it should be located in well-drained soils. He stated it would not be good to have it turn into a pond collecting algae. He stated you want to have it drain within seventy-two hours so that you do not attract mosquitoes. Mr. Pockl stated rain gardens need time to establish and develop their own ecosystem. He stated they might not work perfectly initially, but with some maintenance and depending on the season and when they are planted, once the vegetation takes hold, they tend to work fairly well.

Mr. Pockl stated another structural BMP would be porous paving which could include a patio or a driveway. He stated porous paving need well-drained soils. He stated they are good for pool patios. He stated as with an infiltration trench, if you introducing water into the ground, you do not want to have porous paving as a walkway that leads right to the house. He stated if you do this, you would have to have some type of waterproofing membrane on the outer edge of the basement wall in order to prevent the water that you are introducing into the ground from the porous paving from getting into the basement. He stated typically you want to install it on level ground; and if there is a driveway that slopes away from the home 8% to 10%, the bottom stone layer of the porous paving would have to be level or it will infiltrate down into the stone layer and because of the slope, it will go in the area of least resistance at the lowest point. He stated you want to have the stone layer to be level.

Mr. Pockl stated maintenance for porous paving typically requires routine sweeping or vacuuming to make sure that it does not get clogged with sediment which would prevent water from going into the ground. Mr. Pockl stated he believes that the Township provides credit toward impervious area with the use of porous paving. Mr. Majewski stated it is beneficial for stormwater management; and while you get credit for stormwater management, it does not reduce the allowable impervious surface on your Lot for a Residential Lot. He stated for Commercial Lots, you can take credit for the porous paving up to a certain percentage which he believes is 20%.

Mr. Pockl stated rain barrels are another structural BMP. He stated they connect to the roof drains. He stated it is non-potable water. He stated they typically hold approximately 50 gallons, and you can install them in a series, and have one at each downspout. He stated they do not function well in the winter since typically they are made of plastic which tends to freeze in the winter. He stated a half inch of rain on a 1,000 square foot home creates 600 gallons of stormwater run-off so that if you have four downspouts that would be 150 gallons coming down, and you would need three rain barrels in order to capture the entire storm for a half inch of rain. He stated while they do not hold much, rain barrels are inexpensive; and if a homeowner wants to make an improvement and re-use some water, this is an effective way to water plants and gardens.

Mr. Pockl stated Operation and Maintenance is a requirement for all new privately-owned Best Management Practices that are implemented. He stated an Operation and Maintenance Agreement would be completed and filed with the County. He stated these Agreements should have a map of the Best Management Practice location, a Plan of its maintenance activities, and the name and contact information for the person responsible for that Best Management Practice. He stated for larger BMPs it is possible that the Township would want an Access Easement so that the Township could go in with their personnel to inspect it to make sure that it is functioning correctly especially if the Township is going to consider it as part of its system for the MS4 Permit. He stated typically you should check your BMP after every major storm event. He stated they also typically recommend doing a more thorough inspection twice a year – in the spring before vegetation is planted and in the fall when leaves start to drop as leaves tend to clog BMPs. Mr. Pockl stated there would be other requirements depending on the size and the type of the Best Management Practice.

Mr. Costello asked if you have a long asphalt driveway with no curbs, could you put in a curb. Mr. Pockl stated you could have an opening in the curb which would allow a point for water to get back into the grass area. He stated if the grass area were to be raised to where the top of the curb would be, depending on the soil type, you could put in an inlet and have a stone bottom on the inlet. He stated water would get down into the inlet and have a chance to infiltrate into the ground. He stated if it is more than what the storm bottom can handle for the storm, it would overflow down into the street.

Mr. Bryson asked if the Township has done any Capital projects related to the MS4 Program or done any projects in conjunction with a developer. Mr. Pockl stated one project would be where bike paths are installed, and a 5' grass area is provided in between the bike path and the roadway to collect some of the run-off from the bike paths. He stated for the most part every development that goes in is required to do a stormwater management system. He stated the Township also has Ordinances related to trees and the Tree Bank Ordinance, and that improves the MS4 Program as well.

Mr. Majewski stated for many Township projects they have done a lot of the items Mr. Pockl discussed this evening. He stated at Memorial Park they installed vegetative swales and rain gardens. He stated they have also done tree planting and naturalized basins at Memorial Park. He stated at the ball fields across the street from the Township Building, they installed rain gardens and other measures to mitigate stormwater and help comply with the MS4 requirements.

Mr. Pockl stated there is a rain garden at the Community Center as well. Mr. Majewski stated they also used porous paving at the Community Center.

Mr. Bush asked how much money is in the Tree Bank and what that translates to in terms of number of trees. Mr. Majewski stated he is not sure of the latest accounting on the Tree Bank, but there is a good amount of money. He stated the EAC had plans to do tree planting at the Patterson Farm in the spring; however, with the COVID-19 problem, that had to be canceled. He stated Tree Bank money can go far if they make use of volunteer efforts and use smaller trees. He stated at the volley ball courts across the street from the Township Building and the baseball fields, they planted several hundred trees and shrubs in those areas.

Mr. Pockl stated the presentation will be available to be viewed on the Township Website for residents to review.

OTHER BUSINESS

Mr. Majewski stated he will be in contact with the Planning Commission as to when they will hold the next Planning Commission meeting. He stated he would like to hold it at the normal date and time although that may be subject to change.

Mr. Bryson asked if they should continue with the Design Guidelines, and

Mr. Majewski agreed. Mr. Bush stated he was up next to discuss parking and circulation. Mr. Bryson asked that Mr. Bush provide information to the Planning Commission members on this so that the next time they meet, they can discuss it. Mr. Bush agreed to circulate something next week.

Ms. Stern asked if they should be re-consider the public open space portion given the COVID-19 situation.

Ms. Kirk stated the Township is developing protocols of what they expect when we are open including social distancing.

Mr. Bryson asked if other Committees such as the Zoning Hearing Board are still meeting. Ms. Kirk stated the Zoning Hearing Board did meet, and their next meeting will be held June 16. Mr. Majewski stated a number of other Boards and Commissions are now meeting using the Zoom platform; and although they are all not being televised live on the Township TV channel, they can be seen on Facebook and YouTube.

There being no further business, Mr. Costello moved, Ms. Stern seconded and it was unanimously carried to adjourn the meeting at 7:15 p.m.

Respectfully Submitted,

Tony Bush, Secretary