

TOWNSHIP OF LOWER MAKEFIELD  
SEWER AUTHORITY  
MINUTES – FEBRUARY 22, 2018

The regular meeting of the Sewer Authority of the Township of Lower Makefield was held in the Municipal Building on February 22, 2018. Mr. Tyler called the meeting to order at 7:30 p.m. and called the Roll.

Those present:

Sewer Authority:            Phil Tyler, Chairman  
                                      Richard Gauck, Vice Chairman  
                                      Scott Ferrante, Secretary

Others:                        Greg Hucklebridge, Public Works Director  
                                      Kelley Watson, Sewer Administrator  
                                      Barbara Kirk, Township Solicitor  
                                      Fred Ebert, Sewer Authority Engineer  
                                      Daniel Grenier, Supervisor Liaison (joined meeting in progress)

Absent:                        Joseph Chirichella, Sewer Authority Member

APPROVAL OF MINUTES

Mr. Tyler moved, Mr. Ferrante seconded and it was unanimously carried to approve the Minutes of January 25, 2018 as written.

ENGINEER'S REPORT

Chapter 94 Report

Mr. Ebert stated he distributed the draft charts. He stated in the packets, there are a series of four packets which refer to the four areas we have in the Township. Mr. Ebert stated the Board of Supervisors passed the Supplemental Agreement to the Neshaminy Interceptor on February 7, and the new flow limits are incorporated.

Mr. Ebert stated the red line is our 2017 average daily flow, and the blue line below that is the five-year average flow; and that is what we have to meet. Mr. Ebert stated the five-year annual average flow decreased because we lost the calendar year 2011 which had 75" of rain compared to the normal of 55" of rain. He stated while our annual average is over, we are clearly below the instantaneous peak hourly flow. He stated we exceeded the maximum daily flow on four occasions last year which is good.

Mr. Ebert stated there are two pump stations that are hydraulically overloaded one of which is the Chanticleer pump station. He showed the chart showing that pump station. Mr. Ebert stated with only one pump operating the actual capacity is 16,900 gallons; and the annual flows are approximately 18,500. He stated there are fourteen proposed connections. He stated the solution is going to be the replacement of the existing 2" force main with a 3" force main, approximately 900' long across an open space area; and it will cost approximately \$36,000. Mr. Ebert stated they are going to be working with the developer of the Dogwood Drive development to subsidize that cost.

Mr. Grenier joined the meeting at this time.

Mr. Ebert stated the second pump station we have that is hydraulically overloaded is the Brookstone pump station. He stated the existing impellers in that pump station are significantly worn out, and they have lost pumping capacity. He stated the installed capacity is approximately 25,000 gallons, and our average annual flow is 70,000; but they have had no overflows at that pump station. He stated there are no proposed connections. He stated rather than replace the impellers, it makes more sense to replace both pumps. He stated they budgeted \$50,000. He stated the actual cost is \$14,300 and service for the installation is approximately \$1,200 per day. He stated they bid a purchase-only spec on it, and it is a very specific design criteria that would have to be met. He stated this needs to be done this spring/summer, and it will be part of the overall Operating Budget.

Mr. Ebert stated with regard to the Morrisville flows, and annual average flow to Morrisville is 1,307,000 gallons per day; and the maximum monthly flow is approximately 1.6 million gallons. He stated they want to be under 1.2 maximum month annual average. He stated they have two pump stations which will have to be addressed at some point in the future. He noted the pump station data in the information he had provided, and there are two pump stations that are over the Permitted capacity, and this will be addressed in the Chapter 94 Report and the Act 537 Plan that we do for Morrisville. He stated the biggest one is Silver Lake where there are already three pumps installed. He stated there is a Permitted capacity of 380,000, but the annual average flow was 746,000; and this is a significant issue we are going to have to address. He stated at Black Rock, we are well within capacity; and the capacity is approximately 227,000, and we are only pumping an annual average of 128,000. Mr. Ebert stated at Sherwood they are close, as the Permitting capacity is approximately 185 and the actual is 179. Mr. Ebert stated at Heacock Road we are over; however, that is due to an impeller. He stated at Heacock, they are going to replace the

force main which will help with the friction. He stated the impellers are worn out; and rather than replace the impellers, they want to do that while they are by-pass pumping for the force main replacement project. He stated the force main replacement project will go forward in the spring.

Mr. Ebert noted the next chart with regard to the flows to Yardley Borough. He stated we are reporting to Yardley Borough since all these flows go through Yardley Borough and come back out and go to Morrisville for treatment. He stated they are all contained in the flows to Morrisville. He stated we are monitoring this to make sure we are in accordance with the Capacity Rights Agreement. He stated we recently passed the Yardley Borough Act 537 Plan which implements the 2015 financial obligations to upgrade their infrastructure. He stated at the Brock Creek Interceptor, they are doing replacement of their mains. He stated Lower Makefield can put 1.7 million gallons through there per the Agreement; and we are not near the total amount of capacity that goes through there.

Mr. Ebert stated there are a total of five pump stations that go into the Yardley service area, and there are no hydraulic overloads in any of them. He stated we are close at Maplevale, and it is part of our long-term Capital Plan to address the sanitary sewers that are in Maplevale. He stated Clearview Permitted capacity is approximately 94,000, and we are flowing at 16,000 which is plenty of capacity. He stated Maplevale actual flows are 30,500 and Permitted capacity is 30,600 so that is very close. He stated Fox Hill is 86,000 Permitted capacity, and we are flowing at 79,000. He stated Yardley Estates is 90,000 Permitted capacity, and we are flowing at 80,000. He stated Mill Road Estates Permitted capacity is 25,000, and we are flowing at 6,400.

Mr. Ebert noted the flow summary for Falls Township. He stated we flow through three to four meter pits through the existing Agreement with Falls Township. He stated flows have been the same for the last few years.

Mr. Ebert stated next month he will present a more formalized Chapter 94. He stated he will be providing these flows to all four of the Municipal entities as they need to complete their Chapter 94 Reports and submit them to DEP by March 31, and he would like authorization from the Sewer Authority to provide the flow information to the four host Municipalities.

Mr. Ferrante moved, Mr. Gauck seconded and it was unanimously carried to provide the flow information to the four host Municipalities that supply us with service.

Bucks County Water and Sewer Authority Supplemental Agreement

Mr. Ebert stated the Board of Supervisors passed this on February 7, it was forwarded to Bucks County on February 13, and we have distributed courtesy copies to DEP to make them aware of it.

Mr. Ebert stated the Act 537 Plan is based on four overall components, and a draft copy was provided to the Sewer Authority members this week; and the Sewer Authority has seen the vast majority of it already. He stated it incorporates the Corrective Action Plan which DEP approved in November, 2017, and the Supplemental Agreement, which was recommended to the Board of Supervisors for approval by the Sewer Authority. Mr. Ebert stated the third component is that it provides flow projections for the twenty-year planning horizon, and it does that in two sections. He stated he worked closely with Mr. Majewski on this. Mr. Ebert stated the last thing it does is incorporate the selected alternatives of Bucks County Water and Sewer Authority which is basically the lining of their interceptor. Mr. Ebert stated this has been submitted to the Lower Makefield Township Planning Commission, and it will be introduced at their February 26 meeting. He will ask for action on it at the Planning Commission's March 12 meeting. Mr. Ebert stated it was also submitted to the Bucks County Planning Commission for their review and comment, and also submitted to the Bucks County Health Department, and Bucks County Water and Sewer Authority for their review. He stated an advance copy was also transmitted to DEP.

Proposed Stackhouse Pump Station Relocation – Grant Application

Mr. Ebert stated the Grant is for approximately \$480,000. He stated he pulled out the gravity line since whatever is put in the project has to Bid under \$500,000 to be eligible. Mr. Ebert stated he was concerned that if he did not get a good Bid he would lose the Grant if he included the gravity line. He stated the Board of Supervisors approved the Resolution for this Grant Application last night, and it will be submitted prior to the deadline of February 28.

Mr. Tyler asked if they have the land for the new pump station, and Mr. Ebert stated they are in negotiations.

Further Discussion on the Act 537 Plan

Mr. Ebert stated this will probably be up for action by the Board of Supervisors at some point in April, and they would like to have a recommendation to the Board of Supervisors from the Sewer Authority at their March meeting.

Dogwood Drive Update

Mr. Ebert stated this relates to the Chanticleer pump station, and the developer of Dogwood Drive will need direction on this. Mr. Ebert stated in order to provide the capacity for their five-Lot Subdivision and for nine existing lots, they will negotiate with the Township as to their contribution. Mr. Ebert suggested that the developer pay for the replacement of the force main. He stated it would involve putting parallel to our existing 2" a new 3" for approximately nine hundred linear feet; and the cost estimate for this is approximately \$36,000 which he feels is conservative, and the developer may be able to do better using private dollars. He stated it is 4' deep, and there is no pavement restoration as it is going across a meadow. He stated his recommendation is to install it parallel so that they do not have to do any by-pass pumping. Mr. Ebert stated the Township would potentially pay for the replacement of the pumps. He stated the pumps are approximately \$28,000, and he wants to go from single phase to three phase.

Mr. Tyler asked why the developer would not be asked to pay more. Mr. Ebert stated while they could, the developer is only proposing five houses, and it is already providing connections to nine existing houses as well as putting in 900' feet of off-site sewer improvements. Mr. Ebert stated he feels there is responsibility on the part of the developer, but he does not feel it is 100%, although he will put forth whatever position the Township desires.

Ms. Kirk asked if there is a summary statement prepared as to what Mr. Ebert is proposing, and Mr. Ebert stated there is not. He added he was in contact with their engineer today, and he first wanted to get initial feedback from the Sewer Authority before he put out a position paper. He stated he also needs input from the Board of Supervisors. He stated there would be an internal staff meeting first, and then they would meet with the developer with a proposal. Mr. Ebert stated the developer is only building five houses, and they are already making the developer extend to provide services to nine existing residences.

Ms. Kirk suggested they see if he would pay for one pump and the force main. Mr. Ebert stated he would rather have the developer do the force main since it would be more expensive for the Township to do that. Mr. Ebert stated the Township may be able to purchase the pumps on COSTARS, and it would be below the Bid limit for the Township to do the installation.

Ms. Kirk asked Mr. Ebert to prepare a draft letter that he would propose to send, and circulate it to the Sewer Authority for their comments; and Mr. Ebert agreed to do so.

Update on Bucks County Water and Sewer Supplemental Agreement

Mr. Grenier stated Mr. Fedorchak advised him late this afternoon, that they approved it last week. Mr. Grenier stated the Neshaminy Act 537 Plan was submitted to DEP yesterday, and the next step is reach out to DEP to see if they are willing to meet once they do an initial technical review.

Mr. Ebert advised Mr. Grenier that it also went out to Bucks County Health Department, Bucks County Planning Commission, and Lower Makefield's own Planning Commission last week.

MORRISVILLE MUNICIPAL AUTHORITY PRESENTATION

Mr. Tom Jennings, attorney, was present with Mr. Bob Campbell, the Authority's engineer, Mr. Todd Poole, 4Ward Planning, and Mr. John Warendia.

Mr. Jennings stated they want the Sewer Authority to hear from Bob Campbell of Pennoni and Todd Poole, a land economist, who the Authority engaged some months ago to offer financial analysis.

Mr. Campbell stated this started when Morrisville had some violations at their wastewater treatment plant which were effluent quality violations. He stated He stated the DEP stepped in and issued a Consent Assessment of Civil Penalty; and in response to that they asked Morrisville to prepare a Corrective Action Plan, and he prepared a Feasibility Study. Mr. Campbell stated that Study came up with two options – one was to build a new plant and the other was to try to retrofit the existing plant in place. He stated at the time, they were thinking the better option was to try to retrofit the existing plant; however, as the numbers grew, that became less of a feasible option. Mr. Campbell stated they negotiated the Consent Assessment of Civil Penalty with the DEP so that is now off the table; however, they are still looking at the Corrective Action Plan.

Mr. Campbell stated step one of the Corrective Action Plan was to put in tertiary filters which they have completed. He stated that work is in and paid for, and it is currently in operation. Mr. Campbell stated step two, which the DEP has not yet enforced on them, would be to install new secondary clarifiers at the south plant. He stated there are ten steps on the Corrective Action Plan which would occur over a period of ten years. Mr. Campbell stated DEP has not forced them to do anything further to take the next step. He stated instead they have allowed them to go through 537 Planning and try to determine what is the best alternative. Mr. Campbell stated Morrisville's understanding, given all of the meetings and everyone looking at the plant, is that the best alternative for everyone is to replace the plant. He stated currently they have a UNOX system that is obsolete, and they

have to fly someone in on a quarterly basis to do maintenance, as there are only two people in the Country that they are aware of who are able to maintain these systems. He stated they continue to do the maintenance; however, it is difficult to maintain, and there are only a couple of these systems in the Country, and it is a completely obsolete system that needs to be replaced. He stated he believes Yardley, Lower Makefield, and Morrisville have come to the agreement that the plant really needs to be replaced; and they cannot continue to operate with this type of system.

Mr. Campbell stated he prepared a Task Activity Report which is the first step of the 537 Plan, and they submitted that to the DEP which reviewed it. Mr. Campbell stated one of the alternatives for the Task Activity Report was a “no action plan,” which is one of the ones they required; but that is off the table. He stated another alternative was the Plan that they had in the Feasibility Study which is a phased approach to try to bring in new facilities; however, that maintains a lot of the existing infrastructure. He stated another alternative was building a new plant on the existing site which is a thirteen-acre site which would be tight. He stated the last option is to build a new treatment plant on a new site. He stated their initial approach for this was looking at a site that was not too far downstream of Morrisville’s existing plant, but because of environmental and other concerns that did not come to fruition as a possible alternative. He stated the site they are looking at now is at the Keystone Industrial Complex, and that seems to be a viable option at this point.

Mr. Gauck asked for more information about where the relocation site would be. Mr. Jennings stated the Authority was first looking at a site proposed by a company called Solvay. It was eighty-nine acres; however, it was found not to be feasible because it was much larger than the Authority was looking for. Mr. Jennings also stated his sense was that the owner of the property had other aspirations for developing that property. He stated the property is still available, but Morrisville has since looked elsewhere. Mr. Jennings stated the site they are looking at currently is in Fairless Hills at the Keystone Industrial Port Complex, formerly known as the Fairless Works of U. S. Steel. He stated it is approximately forty acres, relatively clean with the Act 2 process nearly completed for it. Mr. Jennings stated another purchaser had been looking at it; however, that deal failed, and it then became available to Morrisville. Mr. Jennings stated they have a Letter of Intent, and the Township solicitor and the Lower Makefield Board of Supervisors are aware that it runs for a period of months; and he hopes to engage in a negotiation leading up to but not necessarily executing a Purchase and Sale Agreement the first quarter of 2018. He stated they need to move this forward, and they are fairly confident they will be able to get into it and have more dialogue with Lower Makefield, Yardley, and Morrisville as well as Falls Township.

Mr. Todd Poole stated his firm performed an analysis on behalf of this project. He stated they evaluated two different scenarios. He stated Option 1 was a re-build in place where the plant would be taken down in halves as they could not take down the entire plant and still provide service. He stated over a period of approximately five years as estimated by Pennoni, the plant would be rebuilt taking down 50% at a time; and the estimated capital cost for doing so is approximately \$80 million. He stated that \$80 million would pay for the same level of service to the existing users of the facility, and there would not be any expansion involved in that \$80 million. He stated it would bring the plant into compliance with DEP and would in general allow for the operation to continue without any further major capitalization due for approximately ten years after the start of the construction. He stated new tertiary filters would be required about five years after the plant was fully operational. He stated the plant would become fully operational about five years once it was commenced in terms of the rebuilding. He stated it would take that long to build because they would be building it one component at a time.

Mr. Poole stated Option 2 would be a larger facility that could expand to handle additional users, and it would be contemplated to not only accommodate the existing three Municipal users but a fourth or possibly more than a fourth user. He stated the estimated capital cost for that project would be approximately \$100 million. He stated in both Option 1 and Option 2, they assumed that \$80 million is being financed through revenue bonds. He stated under that scenario the three existing Municipalities whether it is Option 1 or Option 2, would realize the same obligation in terms of debt financing. He stated the additional \$20 million under Option 2 would be borne by the fourth or fifth Municipal user or other users that would come on line so that would not be an obligation they would see would be for any of the existing Municipalities.

Mr. Poole stated Option 2 would be a brand new facility and as such it would be built concurrent with the existing facility operating. He stated they estimated that it would take approximately twenty-four to thirty months as opposed to sixty months to get the new plant to be fully operational. He stated once it is fully operational, it would be state-of-the-art; and it would also have the ability to be expanded in the future if necessary because of the larger footprint. He stated the existing plants sits on an approximately thirteen-acre footprint. He stated the facility at Keystone would be between thirty and forty acres of land area so it could be expanded.

Mr. Poole stated for the new plant they would have new sustainable power features added to the plant that would not necessarily be able to be added to the existing plant for reasons of space considerations and other issues. He stated this new plant would also save in terms of operating costs particularly with regard to water recycling, with respect to the amount of personnel that would need to operate it because of the economies of scale, as well as other cost savings due to the state-of-the-art equipment and procedures.

Mr. Poole stated while the capital costs are \$20 million higher for Option 2, what they have estimated based on cost of operation is that Option 2 provides for a lower annual cost of operation at stabilization which means that once both plants were stabilized in the first year, the Option 2 scenario comes in about \$1 million less than what it would cost to run Option 1 which works out to approximately \$3.8 million per year for Option 1 versus \$2.9 million for Option 2; and that difference is related specifically to the operating expense and has nothing to do with the Debt Service which is a non-operating expense.

Mr. Poole stated because Option 2 has the ability to facilitate service to both current and prospective Industrial users at Keystone, it could also be viewed as an economic development project; and because of that, they have, and will continue to apply for Economic Development Grant funding that is made available at the State level that is authorized annually. He stated they do not know how much could come in; however, they believe that particular funding could be \$1 million to \$10 million. He stated all of that money would go to defray the capital cost of developing the Option 2 scenario. He stated the Option 2 scenario is projected to probably go between forty and fifty years before requiring any substantial capital outlay for improvement or repairing it. He stated this is in contrast to Option 1, and it is believed that within the first twenty years will probably require major capital improvement on the existing facility which would be another major capital expense they would want to consider.

He stated looking at both options - rebuilding in place versus build new, what they have identified and based on having a state-of-the-art facility that would realize economies of scale and allow for more efficient operations would show a lower operating expense for Option 2 to build a new plant at the Keystone site.

Mr. Tyler asked if they have found any Federal or State grant money to help with the project. Mr. Jennings stated they have applied, and will apply again in a day or so for State Grant money. He stated they have also looked for Federal money, and are still looking for funding primarily through the Economic Development Agency of the Federal Government. He stated from time to time, there are smaller Grants available from DEP, and they have looked at them. He stated a project of this particular kind would be a candidate for PENNVEST funding, but they have not gotten that far yet.

Mr. Jennings stated they have been trying to forge a consensus, if that is possible, of the Municipalities before they ultimately sign any papers to move forward.

Mr. Watson asked about the plant that is already there at U. S. Steel, and he asked if they are closing it, and are they in favor of what Morrisville is proposing. Mr. Jennings stated Steel is interested in this project, or they would not have extended to Morrisville a letter of intent to buy the property; however, they have not gotten into a negotiation that would deal with Steel's other properties. Mr. Watson stated he is asking about the sewer plant that is already existing, and Mr. Jennings stated they are familiar with it. Mr. Watson asked if Steel is all for "closing up shop," and going into this new plant and paying their fair share.

Mr. Jennings stated he feels they would be open to getting out of the sewer business completely although that is "not written in stone anywhere," but that has been part of an ongoing discussion. Mr. Watson asked if Falls Township is on board doing this, and Mr. Jennings stated Falls Township is very receptive to this facility being at KIPC; and at a minimum, Morrisville would be before Falls Township for Land Development. Mr. Jennings stated it serves Falls Township's purposes for economic development to have a state-of-the-art public facility down there so that businesses that consider going there or which are there already can stay with a good public system as opposed to a privately-owned system by U. S. Steel which is old.

Mr. Ebert asked the status of any commitments for the \$20 million and if there is any commitment at all by anyone for \$20 million, and Mr. Warena stated there is not. He stated he had the opportunity to listen to Mr. Ebert's presentation to the Board of Supervisors. He stated he would like to try to clear up one misimpression. He stated he is not aware of anyone claiming that they expect any one particular entity to contribute an additional \$20 million to the project. He stated what they have talked about is the possibility, and indeed the likelihood, that if they build on the KIPC site, they would consider the addition of the Industrial pre-treatment module and some other enhancements to the project which they would expect either Waste Management, perhaps, or Steel, or others to wish to contribute to. He stated the other context in which the \$20 million figure has come up is because that is the disparity between the two plant options in round numbers. He stated if they rebuilt in place on the existing footprint, they will not have the opportunity for certain types of Grant funding, RACP funding, or the opportunity for participation of other "players" such as Falls Township or the U. S. Steel properties along New Ford Mill Road and the like. Mr. Warena stated they are cautiously optimistic that if they build the plant at the new location, they will have those opportunities in place which would defray some if not all of the difference in price. He stated that is the context in which he understands the \$20 million discussion to have come up.

Mr. Ebert stated he just heard Mr. Poole say \$80 million by the three users, and that would be all that would have to be borne by the three users; and Mr. Warendt has just stated that is not true. Mr. Warendt stated everything is a projection.

Mr. Ebert stated he wants to be sure when he goes to the Board of Supervisors, and Mr. Warendt stated “be sure to tell them exactly what we said,” or better yet he would be happy to talk to them. Mr. Ebert stated if there are no commitments, he understands that they do not know what the end result will be; and Mr. Warendt stated they do not, and there is no commitment.

Mr. Jennings stated they are pursuing the additional cost from the private sector, from the public sector, from Grant funds, and from wherever they can find it. He stated none of those sources, although some have expressed real interest in doing that the private sector side particularly, is ready to sign a deal because they have not committed to doing it there.

Mr. Warendt stated even if he believes that there are some optimistic possibilities in sight, he is still not going to make any attribution about those possibilities. He stated they know for a certainty that the participating Municipalities will have to pick up at least \$80 million in either situation, and he believes that is the premise on which they begin the analysis in a situation like this. He stated that is not to say that they do not have hope for more from other sources or that they do. He stated he would be happy to talk to the Board of Supervisors about this. Mr. Tyler stated he wants Morrisville to talk to the Sewer Authority and then go on from there. Mr. Warendt stated anyway Lower Makefield wants to handle the discussions is okay with him. He stated it is a “chicken and the egg” problem, and no one wants to be first to make commitments. He stated Morrisville has an obligation in terms of their treatment plant to DEP and to their customers, so they are really first in line when it comes to having to deal with some of these things. Mr. Tyler stated Lower Makefield has an “open mind” about the whole thing. He stated Morrisville came to their meeting when they had their first site, and now Lower Makefield is listening again.

Mr. Campbell stated one of the factors in the \$80 million and \$100 million difference is size, and they are adding capacity with the \$100 million; and they would be adding 1.3 million gallons of capacity to the system. He stated if they do not need the 1.3 million gallons additional, that cost comes down so it would no longer be \$100 million to build at the new site; and they would then be down to \$80 million to build at the new site. He stated when you look at the cost difference, if there is no commitment to pick that up, then the money is not there either; and the \$20 million goes away if there is no commitment to put in the additional capacity.

Mr. Ebert stated there is an issue with the existing plant that has to get addressed. He asked at what point will they have the information to make the decision as to what size it is and whether someone is in or out so that they can do the 537 Plan. He stated at some point they need to say “this is the plan;” and vote yes or no.

Mr. Warenda stated if Morrisville and Lower Makefield say “this is the plan,” then the rest of it falls into place. He stated they are talking about a difference of ten or fifteen percent, and they are talking only about money.

Mr. Warenda asked Mr. Ebert what he considers to be the best engineering result in a situation like this. Mr. Warenda stated if a new plant on a vacant piece of property with newer technology and new equipment makes more sense for almost the same price, and you have the foreseeability, not the certainty, of other people coming on since they have enlarged the regional outreach with the better location and with some people expressing interest in some of this, does it make sense not to take advantage of that. He stated planning involves certain “leaps of faith.”

Ms. Kirk stated at this point Morrisville has projected \$80 million as a base number for either option, and Mr. Poole stated that is incorrect. He stated \$80 million is the projected base cost estimate for Option 1. He stated for Option 2, the all-in number of \$100 million; and he had indicated that under this analysis they made an assumption that \$80 million in both instances would be what they would get financed. Ms. Kirk stated if Lower Makefield decided they wanted to go forward with Option 2, there is nothing saying that after they finance their proportionate share of the \$80 million debt, that they would not be responsible for an additional \$20 million if no one else out there is willing to pick up the \$20 million.

Mr. Campbell stated it would not get built without that. Mr. Poole stated before anyone went to speak to Bond Counsel and looked at floating Bonds, they would know that they do not have another user for the additional capacity of 1.3 million gallons so that will not get built; and the cost of the entire project comes back down. He stated Lower Makefield would still be paying their share of the \$80 million.

Mr. Ebert stated this has to be done in the Act 537 Plan so that is step 1 which is what they are going through right now. He stated they need to make a decision to write the 537 Plan, and Lower Makefield is asking what commitments they have so they can make that option. Mr. Ebert stated he believes the Lower Makefield Supervisors will want the lowest, best cost option for the residents with the information that they know today. He stated they are not going to want to take a chance using taxpayer or sewer rental rate numbers to subsidize whether someone does or does not come tomorrow. He stated they want to deal with the knowns today, and the best option. Mr. Ebert stated he would absolutely rather have a new plant. He stated he has total faith in Pennoni rebuilding on the existing site or on a new site, but he does not believe that there has ever been a treatment plant with mechanical equipment that has a life of fifty years. He stated comments made like

that are what destroys credibility. He stated they all know that plants are mechanical, and he does not know a piece of mechanical equipment that lasts fifty years, and he feels there are going to be major upgrades needed before fifty years. He stated he agrees that with a blank piece of ground, they can build something much more efficiently; but the question is what is that additional cost.

Mr. Warendt asked how do they weigh the options they are talking about against the other options Lower Makefield has talked about with Lower Bucks and Big Bucks. He stated Big Bucks does not have a Corrective Action Plan yet for the Neshaminy Interceptor, and they are a year or two away from that as he understands it as Mr. Ebert stated that at a meeting. Mr. Ebert stated if he had stated that, he made a mistake; and they have a signed Corrective Action Plan. He stated Lower Makefield also has a signed Corrective Action Plan, and Lower Makefield has submitted a 537 Plan that incorporates their Corrective Action Plan. He stated their Corrective Action Plan was reviewed and approved by DEP, and it was done in 2015; and it was known as the Evaluation and Alternative Analysis for the Neshaminy Interceptor, and it was memorialized in a Consent Order and Agreement and a Settlement Agreement between DEP, the City of Philadelphia, and Bucks County Water and Sewer Authority.

Mr. Tyler asked that they keep the discussion to Lower Makefield and Morrisville. Mr. Campbell stated they understand that Lower Makefield is looking at other options, and that affects Morrisville's approach to this. Mr. Campbell stated he agrees Lower Makefield does have to look at other options, and Mr. Tyler stated this is part of their long-term analysis. Mr. Campbell stated there is a Corrective Action Plan for Neshaminy on paper, but he does not feel that looks like a viable option to send additional flows there as he believes they are exceeding capacity as it is right. He stated he does not know what the Lower Bucks cost is, but their plant is at capacity, and this would tie in Yardley as well which would be 3.5 million gallons a day of capacity. He stated they need to weigh that against where Lower Makefield is with the Morrisville option. Mr. Tyler stated Lower Makefield is open to everything they are saying, it will be discussed, and it will then be discussed with the Supervisors.

Mr. Jennings stated Morrisville has no expectation that Lower Makefield will commit to the new site facility project without there being at least a draft in place of what the rights and remedies are and the obligations. Mr. Tyler asked that they be shown this on paper. Mr. Jennings stated if they get something moving along with Lower Makefield, Yardley Borough, Morrisville Borough, and perhaps others, then before anyone signs anything they will all have a sense as to who is in and for how much. He stated they have talked in the past about having a joint resolution among various Municipalities, and there are different ways of getting there. He stated if Lower Makefield states that they "cannot let this go another week, they will see where they are at the end of the week."

Mr. Ebert stated Lower Makefield is also evaluating the option of pulling everything from Bucks County and taking everything to Morrisville, and he was directed to do that as well.

Mr. Grenier stated he has sat through a few presentations, and he has also visited the existing plant. He stated previous options for Option 2 were between \$120 million and \$150 million; and now he is hearing that it is \$100 million, and he asked what is the change that occurred between what Morrisville is now saying and what he heard before. Mr. Campbell stated the \$150 million option included Morrisville building a pump station to convey flows from U. S. Steel over to the new plant and it also included a pre-treatment component of the new plant. He stated that was everything for their RCAP fund. It was noted it was also a larger property so there was larger land cost. Mr. Campbell stated it was a Grant-funding view and it included a benefit to Waste Management and a benefit to U. S. Steel, and including what was private work into their Grant Application. He stated they have come down off of that. He stated the \$120 million was where they started; and as they have narrowed down the numbers, they are now looking at \$100 million.

Mr. Warena stated Mr. Ebert gets credit for some of those changes. Mr. Warena stated when they had the combined meeting at the Township four to five months ago, Mr. Ebert made a power point presentation; and one of the differences was the safety factor that Mr. Ebert built in. He stated if they utilize the numbers that Mr. Ebert talked about, the principal figures get a lot closer. He stated Mr. Warena stated he is grateful to Pennoni for never underestimating things for him, but the numbers get closer as they look into them further. He stated he feels the numbers that Mr. Ebert and Mr. Campbell are talking about at this point are fairly accurate.

Mr. Jennings stated they also had the benefit of Mr. Poole's firm helping them with the calculations to get to these numbers.

Mr. Tyler asked what they will do with the old plant when they shut it down. Mr. Warena stated the cost of raising the old plant is not the responsibility of Lower Makefield, Yardley, or anyone else outside of Morrisville; and it has not been built into the cost consideration. He stated probably it is a "dollar property."

Mr. Warena stated he would like to emphasize that they are not in a holding pattern, and they continue to prepare these documents, conduct meetings, and move ahead in a way that is consistent with accomplishing one or the other alternatives. He stated they have a draft of a 537 Plan at this point, but he does not know what their timeline is. He stated they cannot spend another two to three years waiting for another alternative analysis since they started doing this in 2015.

Mr. Campbell stated their expectation is that if DEP sees this going out too long, they are going to be required proceed with the next phase which is spending \$7 million to put clarifiers in. He stated they would then be “sinking good money after bad” since it would not help them out with either option. Mr. Warendt stated Lower Makefield needs to remember that 40% of that is Lower Makefield’s responsibility. Mr. Tyler stated he is aware of that yet they are still sitting here talking about this, and no one is putting a shovel in the ground.

Mr. Jennings stated it has been useful to have engaged various bodies – the Environmental Advisory Council, the Yardley Sewer Authority, and they had two large stakeholder meetings in Lower Makefield; and as a result of listening to that, Morrisville has tried to refine their plans and enter that into the consideration of the site that they are most optimistic about at this time. He stated if Lower Makefield would like to have them back in the not too distant future, that would be helpful to Morrisville.

Mr. Tyler stated they would like monthly updates and would like to know how close Morrisville is to purchasing the land. He stated they would also like to know once all the parties are in, if they are going to have seats on the Board. Mr. Warendt stated he has consistently stated since day one, that if they build a new plant at a new location, he would fully expect there to be another form of governance whether that involves modifying the charter to accommodate a restructuring of the Board, which does create another problem since they also have a water business, or to form another Authority. Mr. Warendt stated he does not have any reservations about this, and he has advised his Board that they should not have any reservations about that either. He stated until we know what we are going to do, there is no point in filing documents that would start creating a Joint Municipal Authority; but if we know we are going to build a new plant on a new site, Lower Makefield should call him “the next morning,” and they will talk about how to organize another Joint Municipal Authority. He stated Lower Makefield still owns their and Morrisville still owns their infrastructure, but everyone will own a piece of the plant if that is what Lower Makefield wants to do. Mr. Tyler stated Lower Makefield would want to put their input in. Mr. Warendt stated that would not be a problem.

Mr. Warendt stated he has been doing this for over seventeen years and has been the Executive Director for nine years, and when he came on board he tried to get people interested in these issues. He stated they have never put out “really bad effluent” although they did have some violations. He stated the problem came to a head in 2014 when the north UNOX reactor had an issue. He stated the UNOX process they use is a closed reactor system, and he reviewed how the process works. He stated over a time a lot of synthetic materials started to build up, and when they cracked open the UNOX to clean it out you could “walk across the stuff,” and that is what provoked the series of things that took place that

bring us here today. He stated there was not a big delay in letting people know, and his first written comment to everyone was in 2015 that there was a problem and they needed to do something about it; and now we are here.

Mr. Warendt stated he knows that the idea of a new plant did not sit well initially with people and seemed overly ambitious, but it is not a terrible idea. He stated the Regulators do not like small plants or private plants. He stated they have professionals that do a good job, and he would look to see a better, modern facility that gives them the opportunity to handle what may come in the future for the next twenty to fifty years. He stated he agrees with Mr. Ebert that nothing lasts fifty years; however, they have things in the ground that are not going to last five years.

Mr. Jennings stated if the Sewer Authority would like to have them back in two to three months, they would be happy to come to provide an update. Mr. Tyler stated if Morrisville gets more information that they can pass on, they would be happy to have them come back.

Mr. Warendt stated he has talked to Mr. Fedorchak and others about doing a presentation publicly before the Supervisors if they wish since they televise those meetings for the residents; and if they want them to do that, they will. He stated he feels it would be helpful for more people to understand what is going on. He stated he has tried to circulate information in the Township. He stated they did circulate information in the Borough.

Mr. Tyler stated in Lower Makefield there are flows that go to Yardley/ Morrisville and flows that go elsewhere including to Falls Township. Mr. Warendt stated with the computers they can tell where the flows go to, and all they need is the account list. Mr. Tyler stated they will speak to Ms. Kirk about this, and ask her to advise them at their next meeting. Mr. Warendt stated they had something ready to go a year ago. Mr. Tyler stated actually the Township is their only customer – not the people of Lower Makefield since they pay the Township, and the Township pays Morrisville. Mr. Jennings stated he is a Lower Makefield resident whose flows go to Morrisville, and the quarterly bill he gets evens out to what the Township residents who use Big Bucks pay so in effect part of the Township is subsidizing that higher cost. He stated this is a fact that some would not know until they look into it so he feels there is a fair amount of public education that can be done. He stated they have initiated outreach programs, and they made a presentation to the Lower Makefield Township EAC which was a great presentation and they had meaningful discussion. Mr. Tyler stated there are new Supervisors now, and they will discuss this at the next Sewer Authority meeting with Ms. Kirk.

There was discussion about what Mr. Ebert was authorized to look into by the Board of Supervisors. Mr. Ebert stated he will be able to report at the March meeting how long this will take. Mr. Ebert stated he feels they need to know by the end of the year how they will proceed.

#### SOLICITOR'S REPORT

Ms. Kirk stated the plan seems to be that Morrisville will be building a new facility even though there is not a fourth entity to pay for the additional cost. She also stated Mr. Warena indicated there would be a Joint Authority only if a new plant is built.

Mr. Ebert stated it will cost \$20 million to \$30 million to get the flows down to the new facility, and he reviewed what would be necessary.

Ms. Kirk stated the Sewer Authority might consider asking Morrisville to outline exactly what they are proposing. Mr. Tyler stated they are hoping that Lower Makefield will be their partner in the new plant. He stated they now know that Lower Makefield is looking at other options. Mr. Ebert stated at the public meeting, the Sewer Authority asked the Board of Supervisors for authorization to pursue the Lower Bucks option. Mr. Ebert stated Mr. Warena watched the Board of Supervisors meeting which is televised, and he was quoting this evening what Mr. Ebert had said to the Board of Supervisors. Mr. Ebert stated he was directed by the Board of Supervisors to look at other options.

Mr. Tyler asked if Morrisville would be able to fund the project by themselves, and it was noted by Mr. Ebert and Ms. Kirk that they could not.

Mr. Ebert stated Lower Makefield cannot “drag their feet,” because at some point as noted by Mr. Campbell, they will have to spend another \$7 million on the existing plant. Mr. Ebert stated at some point Lower Makefield needs to make a decision, and that is why the Board of Supervisors authorized him to look into the options including Lower Bucks, Big Bucks, everything going to Morrisville, etc. He stated Lower Makefield should go to Morrisville once Lower Makefield has all their other facts in line, and ask Morrisville to show how it is going to cost \$80 million and get a commitment that Lower Makefield is paying 44% of \$80 million only; and if they want to bring in Falls and do extra capacity, they should fund it – not Lower Makefield. Ms. Kirk stated she is concerned that Morrisville could start the new plant, and if there is nothing in writing saying Lower Makefield is not responsible for our share of the additional expansion, something will be sent to the Township in the future indicating Lower Makefield owes additional money. Mr. Ebert stated he would never recommend that the

Board of Supervisors adopt a 537 Plan that does not have an agreement in it with an “up-set” amount – that it would be 44% of an amount not to exceed a certain amount; and that any additional costs are Morrisville’s. Mr. Ebert stated his concern is that he would not be controlling their construction, and there could be a “bait and switch,” that he could not stop unless there is an up-set limit.

Mr. Tyler stated he would not commit to anything with Morrisville until they reorganize.

Mr. Ebert stated Lower Makefield loses all of its power with the adoption of the 537 Plan. He stated DEP empowered Lower Makefield through the 537 Plan. Mr. Ebert stated the 537 Plan has to have a new Regional Authority, an Inter-Municipal Agreement, and the construction payment.

Mr. Tyler stated Morrisville does not own any land so at this point it is just talk.

Ms. Kirk asked Mr. Ebert if he was authorized by the Board of Supervisors to start serious talks with Lower Bucks. Mr. Grenier stated the Board authorized Mr. Ebert to conduct an alternatives analysis as to what the alternatives are including Lower Bucks, Big Bucks, Morrisville, and also building our own plant in Lower Makefield.

Mr. Grenier asked Mr. Ebert if he feels he will be given the data that Mr. Poole discussed, and Ms. Kirk stated we have that data. Mr. Ebert stated he does not feel Mr. Poole did any analysis, and all they did was round off the costs. He stated the cost estimate with contingencies was \$120 million; and he does not know how they could “strip it down.” He stated if you are building a new plant, it is not exponential. Mr. Grenier stated this is why he asked how it went from \$120 million to \$150 million down to \$100 million. Mr. Ebert stated they were inflating the costs to get a bigger Grant.

Mr. Ebert stated they keep saying “state-of-the-art,” but the treatment plants are almost identical; and there will not be a \$1 million savings. He stated he also does not feel they will reduce staff if they build a new plant.

Ms. Kirk asked about the work that Mr. Ebert had done which Morrisville was in line with on retrofitting the existing plant. Mr. Ebert stated Morrisville has this. He stated with a new plant there is a lower risk, and Morrisville lowered the factor of safety for a new plant to 5%, but raised it up to 30% for the existing plant.

Ms. Kirk asked how long this can continue until Lower Makefield has an issue with the Act 537. Mr. Ebert stated he feels Morrisville is going to set forth an Act 537 Plan and tell DEP that Lower Makefield “sat on the sidelines” and did not do any planning. Mr. Ebert stated he feels the reason Morrisville now has a draft 537 Plan is because they heard the Board of Supervisors state that they wanted a complete alternative analysis as previously they were just waiting to see what would happen. He stated this new Board of Supervisors has authorized him to do an alternative analysis because the Sewer Authority put this request in writing to the Board of Supervisors.

Mr. Grenier stated Morrisville has a timeline before the plant is in trouble so they will start moving on this. Mr. Grenier asked Mr. Ebert his time line for putting together the alternative analysis so they are ahead of Morrisville. Mr. Ebert stated he will be able to tell them how long this will take at the March meeting. He stated he feels they will realize very quickly that certain options are not feasible so he will not fully explore them. He stated he will then expand on the options that he feels they will really want to focus on. He stated he feels it will be six to nine months before this is all done; however, he feels they will know where they are going in three months. Ms. Kirk asked if that is sufficient time for the Township not to be “backed in a corner;” and Mr. Ebert stated he feels they have a two-year window. He stated he feels they will know by the end of the year where they are going, and it will be implemented in 2020.

Mr. Ebert stated he feels in order to build a new regional authority, prepare a Treatment Agreement, a Capital Improvement Agreement and get through three Boards it will take at least a year of legal.

Mr. Ebert stated there are a certain amount of improvements Lower Bucks will have to do to their plant, and they will have to tell him what they will have to do so he can do his analysis. He stated he needs to tell Lower Bucks what our flows and Yardley flows will be. Mr. Ebert stated it would be simple to put a pump station at the bottom, by-pass Morrisville, and continue on. He stated Big Bucks will have to tell him what he needs to do to send the flows there. Mr. Ebert stated he also feels there are options that would be hybrids including reducing flows to Morrisville or reversing the Heacock force main.

Mr. Grenier asked Mr. Ebert how forthcoming he feels all the groups will be with providing real data, and Mr. Ebert stated he does not feel that will be a problem. He stated he feels the Township will have to pay for their engineers.

Mr. Ebert stated he will probably recommend next month that there be a committee formed of one or two Authority members and one or two Supervisors that he can meet with privately more frequently.

Mr. Grenier stated they may want to consider rather than having public discourse, what would be better served to go through Executive Session as they start to get into some of this information; and they need to discuss this with counsel.

Ms. Kirk stated a recommendation should come from the Sewer Authority to the Board of Supervisors to create a sub-committee to start more actively looking into some of these alternatives.

Mr. Ebert stated he would like reassurance that he is going in the right direction.

Mr. Ferrante moved, Mr. Gauck seconded and it was unanimously carried to recommend to the Board of Supervisors the creation of a joint committee consisting of two members of the Sewer Authority, two members of the Supervisors, and Mr. Ebert to discuss alternatives and future direction.

Mr. Grenier asked that Mr. Hucklebridge be in attendance at well. Mr. Gauck and Mr. Tyler agreed to be the representatives from the Sewer Authority.

#### OTHER BUSINESS

Ms. Kirk stated she has been talking to Mr. Watson and Mr. Hucklebridge about the bills to Verizon for hitting the sewer lines. She stated Verizon was disputing this saying the Township did not call or mark the area; however the area was marked, and Verizon will be asked to pay.

Ms. Kirk asked for an update on Stackhouse, and Mr. Ebert stated the Grant will go in for this. Mr. Hucklebridge stated he has been trying to reach Sandra Middlemiss, the owner of the property, but he has not been able to make contact with her for over a week and a half. He stated he spoke to her before the last Sewer Authority meeting which is when she indicated she had hoped to get \$30,000, and the Township was at \$3,700. Mr. Hucklebridge stated options include a friendly condemnation or include more of the steep sloping area that would be in a Conversation Easement. He stated the \$3,700 was for a purchase. Ms. Kirk asked if they are still considering doing an Easement with a small purchase or are they going to create a bigger lot. Mr. Hucklebridge stated the \$3,700 was for a smaller lot and was to purchase – not an Easement. He stated this has been clarified with the appraiser. Mr. Hucklebridge stated the best use of the property is what the Township is proposing because no one else would be able to do anything with it.

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There being no further business, Mr. Ferrante moved, Mr. Gauck seconded and it was unanimously carried to adjourn the meeting at 9:20 p.m.

Respectfully Submitted,

Scott Ferrante, Secretary