TOWNSHIP OF LOWER MAKEFIELD ZONING HEARING BOARD MINUTES – JANUARY 4, 2022

The regular meeting of the Zoning Hearing Board of the Township of Lower Makefield was held in the Municipal Building on January 4, 2022. Mr. Zamparelli called the meeting to order at 7:30 p.m.

Those present:

Zoning Hearing Board: Anthony Zamparelli, Chair

Peter Solor, Vice Chair

Matthew Connors, Secretary James Dougherty, Member

Others: Barbara Kirk, Township Solicitor

Andrew Pockl, Township Engineer

Adam Flager, Zoning Hearing Board Solicitor

Frederic K. Weiss, Supervisor Liaison

Absent: James Majewski, Director Planning & Zoning

REORGANIZATION OF THE BOARD

Election of Chair of the Board

Mr. Flager asked for nominations for Chair of the Board.

Mr. Connors moved, Mr. Solor seconded and it was unanimously carried to elect Anthony Zamparelli as Chair of the Zoning Hearing Board.

The meeting was turned over to Mr. Zamparelli

Election of Vice Chair of the Board

Mr. Zamparelli moved, Mr. Dougherty seconded and it was unanimously carried to elect Peter Solor as Vice Chair of the Zoning Hearing Board.

Election of Secretary of the Board

Mr. Solor moved, Mr. Dougherty seconded and it was unanimously carried to elect Matthew Connors as Secretary of the Board.

APPOINTMENT OF SOLICITOR

Mr. Zamparelli moved, Mr. Connors seconded and it was unanimously carried to appoint Flager & Associates as the Solicitor.

APPOINTMENT OF COURT REPORTER

Mr. Zamparelli moved, Mr. Connors seconded and it was unanimously carried to appoint Bill Campbell as Court Reporter.

Mr. Zamparelli announced that since there are only four members of the Board present this evening, if there is a tie that would be a Denial.

APPEAL #21-1938 – DOUGLAS & SARAH LEWING Tax Parcel #20-072-038 1500 BROOKFIELD ROAD, YARDLEY, PA, 19067 (Continued from 12/7/21)

Mr. Flager stated since the Applicants were not present at the last meeting, the matter was Continued until this evening. Mr. Lewing stated they were not aware that they were supposed to be present.

Mr. Douglas Lewing and Ms. Sarah Lewing were sworn in.

Mr. Lewing stated they are looking to put a fence in their back yard. It will be a wooden, privacy fence on the part that faces the road; and then a standard black aluminum fence around the rest of the back yard. He added that there is an Easement at the very back of the property line.

Mr. Flager marked the Exhibits as follows: The Application was marked as Exhibit A-1. The Site Plan was marked as Exhibit A-2. The Proof of Publication was marked as Exhibit B-1. The Proof of Posting was marked as Exhibit B-2. The Notice to the neighbors was marked as Exhibit B-3.

Mr. Zamparelli stated since the fence would be on the Easement, the Applicant should understand that if the Township needs to have access, the fence would have to be taken down at the Applicant's expense; and Mr. Lewing agreed.

Mr. Zamparelli asked if there is a pipe underneath, and Mr. Lewing stated he assumes that there is, although it is only grass on his property. He added that further along there is a grate that is in the neighbor's yard.

Mr. Connors stated it is an 18" RCP drainage pipe, and they are proposing to be 3' off of the pipe in the Easement. Mr. Connors stated that is typically what is requested so that they do not puncture the pipe, and Mr. Pockl agreed.

Mr. Pockl stated the other request would be if there is any overland storm water run-off flow, that the fence does not come all the way down to the ground, and that there is a little bit of an area underneath the bottom of the fence so that surface run-off can flow through. Mr. Lewing stated there would be space.

There was no one from the public wishing to speak on this matter.

Mr. Connors moved, Mr. Solor seconded and it was unanimously carried to approve the Appeal to install the fence within the rear drainage easement 3' off of the center line of the 18" RCP pipe and between 4" and 6" above the grade.

APPEAL #21-1942 – JOHN STEINMANN Tax Parcel #20-019-003 27 HOUSTON ROAD, YARDLEY, PA 19067

Mr. Flager marked the Exhibits as follows: The Application was marked as Exhibit A-1. The Site Plan was marked as Exhibit A-2. The Proof of Publication was marked as Exhibit B-1. The Proof of Posting was marked as Exhibit B-2. The Notice to the neighbors was marked as Exhibit B-3.

Mr. John Steinmann and Mr. Matthew Piotrowski, architect, were sworn in.

Mr. Piotrowski stated they are looking to renovate an existing ranch-style house and add an addition to the rear of the house and a small addition to the side of the house. He stated no dimensional Variances are needed.

Mr. Piotrowski stated they are requesting a Variance for impervious coverage. He stated if it were a traditional two-story house, that would be about half the footprint; however, a ranch-style house takes up more square footage on the property than a conventional house. He stated they looked into putting an addition on the second floor; however, it would not work since the reason Mr. Steinmann bought the house was because it was a ranch-style house, and he could age in place. An addition on the second floor would defeat the purpose of having a ranch-style house.

Mr. Piotrowski stated the requirement is 24% maximum impervious coverage, and they are asking for 25.6% which is 248.53 square feet or 1.6% over the maximum allowable impervious coverage. He stated they are proposing a dry well which is sized to take the entire addition which is larger than the 248.53' that they are deficient. He stated by over-sizing the dry well, they are under the intention of the Code.

Mr. Piotrowski stated the proposed addition would not have any adverse effect on the neighboring properties. He stated from the front of the house, other than the expansion of the garage, you would not notice the difference. He stated looking at it from the rear, at 248 square feet, no one would know that they were over the amount of impervious coverage. He stated he knows that impervious coverage is a sensitive issue which is why they proposed the dry well that is oversized. He stated they could build to 24% and not put a dry well in, but they are actually going over and above the intention of the Zoning Code.

Mr. Zamparelli asked Mr. Pockl if the figures that Mr. Piotrowski discussed are correct, and Mr. Pockl stated according to the Exhibit submitted they are.

There was no one from the public wishing to speak on this matter.

Mr. Solor moved and Mr. Connors seconded to approve the Appeal with the increase in the impervious coverage from 16.3% to 25.6% with mitigation to the approval of the Township back to 16.3%

Mr. Piotrowski stated they would be mitigating back to 18%.

Mr. Solor amended the Motion to go back to 18%.

Mr. Solor stated the information provided stated the existing was 16.3%. Mr. Piotrowski stated while that is correct, the dry well is sized for the size of the rear addition and not the side addition of the garage. He stated there is also a little extra driveway that has to be put in, and they are not piping that water to the dry well. He stated it is the addition in the rear of the house that they are piping to the dry well. He stated when you take that square footage, it works out to be 18% of the overall site versus the existing which is 16.3%. Mr. Zamparelli stated 24% is allowed; and Mr. Piotrowski agreed, adding they are under that.

Motion carried unanimously.

APPEAL #21-1943 – PAUL & ELISE WILLARD Tax Parcel #20-057-020 963 PRINCESS DRIVE, YARDLEY, PA 19067

Mr. Flager marked the Exhibits as follows: The Application was marked as Exhibit A-1. The Site Plan (two sheets) was marked as Exhibit A-2. The Proof of Publication was marked as Exhibit B-1. The Proof of Posting was marked as Exhibit B-2. The Notice to the neighbors was marked as Exhibit B-3.

Mr. Paul Willard, Ms. Elise Willard, and Mr. Charles Sudhop, Carlton Pools, were sworn in.

Mr. Willard stated they are trying to get approval for a Variance as they are attempting to put a pool in their back yard. He stated they are currently at 17.21%. He stated they are allowed 18%; and when they install the pool, they are trying to increase it to a maximum of 22.67%. They submitted the Plans with the Permit Application, and they got information back from the Township engineer. He stated he had his engineer make adjustments to the Plans to accommodate all of the things that were requested.

Mr. Zamparelli stated he sees that they show a seepage bed, and he asked Mr. Pockl if the seepage bed is large enough to compensate for the extra water. Mr. Pockl stated the proposed additional impervious area is 1,108 square feet, which is the net increase; and they have a seepage bed sized to accommodate that.

Mr. Solor stated the pool mechanical is shown 6.4' off the line, and he asked if that is acceptable or is a Variance required for that. Mr. Sudhop stated the Zoning requirement for the pool filtration equipment is 5', and that was verified with Mr. Majewski.

Ms. Willard stated she wants to make sure that it is included that in the future they will be adding a shed, and that is also included on the Plan. She stated they want to make sure that the Variance also includes the shed. Mr. Zamparelli asked if the shed is included on the Plan now, and Ms. Willard stated she believes that it is. Mr. Zamparelli stated he does not see a shed. Mr. Solor stated he does not see a shed, and he does not know if it is in their calculations. Mr. Willard stated the shed is supposed to be in the calculations that they got back from the engineer who did the survey. Mr. Zamparelli stated it is not on the Plan. Mr. Connors stated the Plan has the dwelling, driveway, walkway, pool surround, and mechanical pad; but no shed is included.

Ms. Willard stated it might be that they increased the wastewater system to include it in the future. Mr. Zamparelli stated without a Plan showing the size of the shed, that would be hard to determine.

Mr. Connors asked if they would like to Continue the matter to the next meeting so that they can make that adjustment. Mr. Zamparelli stated they would need to have a Plan with the shed being shown and the impervious surface calculations including that. Ms. Willard asked if they did not do that when they would add the shed, would they need another Variance. Mr. Zamparelli stated that is possible. He stated there are also dimensional issues for a shed as well as the requirement of it being in the back quarter of the Lot. He stated if the added impervious area for the shed is more than what the calculation is showing now, they would also need a Variance for that. Mr. Connors stated it would be less time and money if they were to Continue the matter to the next meeting and make the adjustment than if they were to have to come back again when they put in the shed.

Mr. Flager stated the shed was part of the Application and the Notice, but it was not on the Plan so it is not known if it was considered in the calculations.

Mr. Connors stated if they request a Continuance to the next meeting, that would give them time to submit a Revised Plan with the shed shown so that the Board can evaluate what they have submitted. Mr. Flager stated the Board could vote on the impervious tonight; and provided that the shed will be put in the proper location on the property, that would not require a Variance.

Mr. Pockl stated as an alternative, if the proposed pool surround were reduced in size equivalent to the size of the shed, they would still be at the 22.67% proposed impervious area.

Ms. Willard stated they are planning on adding trees to the landscape which they do not have now, and she asked if that would reduce the impervious; however, Board members stated that would not.

Mr. Connors stated the Board could vote on the Appeal tonight as submitted; and if the shed has not been included in the calculations, they could reduce the pool surround by that amount and they would not have to come back. He stated the other option is to request a Continuance to the next meeting, make the changes to the Plan, and the Board will vote on it then.

Mr. Willard stated it is his understanding that the calculations for the storm-water management system included the shed, and he feels that all they are missing is the "square" where the shed is on the Plan. Mr. Pockl and other Board members stated they do not see that in the calculations.

Mr. Zamparelli stated they could reduce the patio area to include the shed size or ask for a Continuance and re-submit the Plans with the shed shown at the next meeting. He stated they can then check the calculations.

Ms. Willard stated she feels they should have the Continuance.

Ms. Judi Reiss stated they have no problem with their next-door neighbors putting in a pool. Ms. Reiss stated she has lived there for forty-six years, and they have no water issues in the area.

Ms. Reiss, 969 Princess Drive, was sworn in and agreed that the Testimony just provided was the truth.

Mr. Connors moved and Mr. Dougherty seconded to Continue the matter to January 18, 2022.

Mr. Willard stated he understands they should provide the updated Plans prior to that meeting, and Mr. Zamparelli agreed. Mr. Flager stated the Plans and the calculations should be submitted to Mr. Majewski so that he can make sure that the calculations for impervious are correct and that the shed is in the proper location on the property.

Motion carried unanimously.

APPEAL #21-1944 – SIMON & DONET TAYLOR Tax Parcel #20-055-061 1513 DAVID TERRACE, MORRISVILLE, PA 19067

Mr. Flager marked the Exhibits as follows: Exhibit A-1 is the CV of Thomas Knab, licensed architect. The 1960 Storm Drainage Plan was marked as Exhibit A-2. The Site Plan revised 10/20/21 was marked as Exhibit A-3. Photos of the stream on the property were marked as Exhibit A-4. The depiction of the potential wall was marked as Exhibit A-5. The Bucks County Conservation letter dated 10/19/21 was marked as Exhibit A-6. The DEP approval letter was marked was marked as Exhibit A-7. The CV of Chris McIntire, engineer, was marked as Exhibit A-8. The Application was marked as Exhibit A-9. The Plans submitted with the Application 10/12/21 (which were revised) were marked as Exhibit A-10. The Proof of Publication was marked as Exhibit B-1. The Proof of Posting was marked as Exhibit B-2. The Notice to the neighbors was marked as Exhibit B-3.

Mr. Thomas Knab, Ms. Donet Taylor, Mr. Chris MacIntyre, and Mr. Simon Taylor, were sworn in.

Mr. Mark Cappuccio, attorney for the Applicants, provided Exhibit binders to the Board members this evening. He stated he had an opportunity to talk to Mr. Flager before the meeting and Ms. Kirk who he understands is appearing on behalf of the Township. He stated he sent Exhibits to Mr. Majewski, Mr. Flager and Ms. Kirk prior to the meeting.

Mr. Cappuccio stated the Application is a request for a Variance from Section 200-55 B.1.a of the Zoning Ordinance to allow for the installation of a retaining wall in the stream to the rear of their property. He stated Mr. Majewski went out to the property as well as to the neighbor's property several times.

Mr. Cappuccio stated when the Land Development Plan was approved by the Township in 1962, the stream at that time was re-directed. He stated originally the stream came across his client's and the neighbor's property, and it was re-directed into an "L" shape so that now it runs along the back of the properties and a retaining wall was constructed at the time that occurred. He stated over the years those walls have deteriorated, and there is really nothing left. He stated the stream has now begun to erode into the rear yard. He stated his clients had installed a fence to the rear of the Lot, and there was land on the other side of that fence; however, it has eroded so badly over time that the land is now gone, and the fence has fallen into the stream. He stated there was also a large tree along the edge, and they were told that because of the erosion the tree had to come down since there was a risk that during a storm, with no stability, that tree could have fallen into one of the homes. He stated there is continuing erosion which is eating up the back yard of the property. Mr. Cappuccio stated they are looking to put the retaining wall back so that the stream bed is back where it is.

Mr. Cappuccio stated Mr. Knab will be testifying as a landscape architect, and he also has experience in Land Development, Planning, and Zoning. Mr. Cappuccio stated he can go over his qualifications and will be offering him as an expert landscape architect. It was agreed to accept Mr. Knab's qualifications as a landscape architect.

Mr. Cappuccio asked Mr. Knab if he was asked by the Taylors to assist with regard to an erosion issue on their property, and Mr. Knab agreed. Mr. Knab stated he was asked to evaluate potential solutions for the erosion that was identified by the Taylors and any possible solutions to reclaiming what they had lost due to the stream erosion. He was the Project Manager for this project along with Mr. MacIntyre, professional engineer. Mr. Knab stated Mr. MacIntyre prepared the Plans that were submitted to the Township.

Mr. Cappuccio asked when Mr. Knab visited the property, and Mr. Knab stated it was the end of March, 2021. Mr. Knab stated he saw the fence that they had installed was falling into the stream. He stated there was also a significant amount of erosion on their property as well as the adjacent neighbor's property with no vegetation remaining and a vertical edge directly into the stream.

Mr. Cappuccio asked Mr. Knab if at some point he asked the Township for a copy of the Land Development Plan from when the Lot was created, and Mr. Knab agreed he did. Mr. Cappuccio noted Exhibit A-2, and Mr. Knab stated that was the Plan that he was provided by the Township. Mr. Knab stated it shows a hand-drawn Subdivision Plan of the Development, with Lot 62 being the Taylor residence. Mr. Cappuccio stated the Development is Milford Manor, and Mr. Knab agreed. Mr. Cappuccio asked if the Plan shows that the stream the entered the Taylors' property was diverted when the Development was created, and Mr. Knab agreed. Mr. Knab stated the stream was diverted in an "L"-shape manner where the original stream was going across their property and their adjacent neighbor's property with two diversion concrete retaining walls to remediate any potential erosion that would occur. The Plan shows two separate retaining walls being constructed.

Mr. Cappuccio asked if Mr. Knab noted the deterioration of the walls when he visited the property, and Mr. Knab stated he did. Mr. Knab stated they clearly failed and appear to have failed for a significant amount of time. He stated the concrete retaining wall is hard to even recognize as a retaining wall. Mr. Cappuccio stated Mr. Knab had indicated that he saw concrete in the stream, and he asked if it appeared from the Plan that when the construction was performed, the retaining wall was extended even longer than shown on the Plan. Mr. Knab stated based on broken concrete and deteriorated concrete in the stream, he believes it was extended toward the Taylor's property.

Mr. Cappuccio noted Exhibit 3 which is the Site Plan. Mr. Knab stated this is a site lay-out plan based on a survey prepared by a professional land surveyor with dimensional information with relation to the stream and shows where the proposed wall would be located.

Mr. Cappuccio noted Exhibit 4 which are photographs taken by Mr. Knab when he was out at the property. Mr. Knab stated photograph 4A shows the erosion that he noted at his initial site visit. It shows the fence that the Taylors had installed falling into the stream. Mr. Knab stated he has since been out to the property since the photo was taken, and it appears that it has gotten worse over the course of the past couple of months. Mr. Knab stated he understands that this has been occurring as long as the Taylors have lived at the property. Photograph 4B was shown, and Mr. Knab stated this is in the other direction looking down the stream and shows the same type of erosion that is happening and the fence that is falling into the stream.

Photograph 4C was shown, and Mr. Knab stated looking back in the other direction you can see some of the broken concrete and a tree that had to be removed because of the erosion. Photograph 4D was shown, and Mr. Knab stated this is looking straight at the stream with the fence falling into the stream, the erosion, and the tree that had to be removed.

Mr. Cappuccio asked Mr. Knab if there is a method by which the erosion can be stopped; and Mr. Knab stated based on their evaluation, they feel a segmented block retaining wall sitting on top of a poured concrete bed would be the best and lowest-impact option for the Taylors. Mr. Cappuccio asked the Board to refer to Tab 5 which has a photo and a description of what is being proposed. Mr. Knab stated the picture on the left is from Redi-Rock which is the manufacturer of wall block that they are proposing to use, which is very common in applications such as these. He stated the image on the right is an elevation from structural drawings their consultants prepared for the proposed wall.

Mr. Cappuccio asked Mr. Knab to describe the appearance of the wall noting that the stone is similar to an E P Henry-type stone. Mr. Knab stated it is very similar in type of construction and style, and the only difference is Redi-Rock is a large block retaining wall. He stated they are jumbo blocks which are much more stable and require a lot less reinforcement behind the wall. He added that they are extremely effective in effective in an application such as this. He stated in terms of style it is a stacked block similar to an E P Henry wall as opposed to a pour concrete wall.

Mr. Zamparelli asked if they are inter-locking, and Mr. Knab stated they inter-lock and each block is poured concrete made to look like stone. He stated they interlock and there is drainage stone behind, which their consultants have prepared structural drawings for. The height of the wall will be 7'6" at the highest point and then tapering to existing grade at either end. It will be approximately 33' in length.

Mr. Cappuccio asked Mr. Knab if he anticipates any adverse impact visually from appearance of the wall, and Mr. Knab stated he does not.

Mr. Cappuccio noted Section 200-B.1 of the Zoning Ordinance from which they are seeking relief, and he asked Mr. Knab if he had a chance to review that Section of the Ordinance; and Mr. Knab stated he has. Mr. Cappuccio stated that Section discusses no encroachments, new construction, substantial improvements, or other development be permitted unless it was demonstrated

through hydrologic and hydraulic analyses under standard engineering practices that there would not be an increase in flood levels; and he asked Mr. Knab if he believes that type of analysis is necessary here. Mr. Knab stated he does not since it is supplementing and enhancing the original intent of the concrete walls that were constructed that has now failed, the impact to the flood level would be de minimous, and the drainage nature behind the retaining wall would allow any water to flow between the proposed retaining wall.

Mr. Cappuccio asked if there is anything being constructed along the stream bed that was not there previously, and Mr. Knab stated there is not to his knowledge.

Mr. Cappuccio asked Mr. Knab if he believes that the engineering analysis referenced in this Section are necessary, and Mr. Knab stated he does not feel they are necessary.

Mr. Cappuccio asked Mr. Knab if they received approval from DEP and the Bucks County Conservation District, and Mr. Knab agreed. Mr. Knab added that they received an E & S Permit from the Bucks County Conservation District. He stated it requires a pre-construction meeting, which they will organize. He stated they also received a Chapter 105 DEP General Permit 3 from the Pennsylvania Department of Environmental Protection.

Mr. Cappuccio advised the Board that those are in their packet as Exhibits A-6 and A-7.

Mr. Cappuccio asked Mr. Knab if he believes that the Taylor property has any unique physical circumstances or a condition that would create an unnecessary hardship. Mr. Knab stated he feels that the hardship in this circumstance is the failing wall that was previously constructed.

Mr. Cappuccio asked Mr. Knab if the relief being constructed is so that they can continue to use the property as it had been used from the time they moved there in the 1990's without losing additional property to erosion, and Mr. Knab agreed. Mr. Knab added he understands that the intent of the project is not to gain any additional, but just to reclaim what they have lost since they have lived at the property. Mr. Cappuccio asked if this will also stop further erosion, and Mr. Knab agreed.

Mr. Cappuccio asked Mr. Knab if he believes that the Taylors created the unnecessary hardship, and Mr. Knab stated they did not. Mr. Cappuccio stated the Taylors did not divert the stream, rather it was the Township which authorized that in 1962; and Mr. Knab agreed.

Mr. Cappuccio asked Mr. Knab if he believes that the construction of the proposed retaining wall will alter the essential character of the neighborhood or the District where the property is located, and Mr. Knab stated he does not. Mr. Cappuccio asked Mr. Knab if he believes that the Variance if authorized would substantially or permanently impair the development of any adjacent property, and Mr. Knab stated he does not. Mr. Cappuccio asked Mr. Knab if he believes that it would be detrimental to the public welfare; and Mr. Knab stated he does not adding that the orientation and lay-out of the wall was designed by Mr. MacIntyre in conjunction with the Township engineer so that no additional erosion would occur, and it been scrutinized on a number of different levels.

Mr. Cappuccio asked Mr. Knab if the Variance request the minimum Variance that would afford relief in this situation, and Mr. Cappuccio agreed.

Ms. Kirk noted Exhibit 2 which is the Plan submitted as part of the original Land Development Plan, and she asked Mr. Knab if that is the only original Land Development document that he studied in determining that this wall would be appropriate as a mitigation measure. Mr. Knab stated there was a meeting approximately a month or two ago attended by himself, Mr. Majewski, the Township engineer, and Mr. MacIntyre to discuss the project and the fact that a Variance would be required; and they were given this Plan by Mr. Majewski as the Land Development Plan on file.

Ms. Kirk asked Mr. Knab if he has any idea as to the number of houses in the area that would have flowed into the stream at the time of the original Land Development; however, Mr. Knab stated he did not. Ms. Kirk asked if it would be fair to say that since the 1960 Land Development Plan there has been more development in the area which has created more flow into the stream, and Mr. Knab agreed that is possible from an upstream standpoint.

Ms. Kirk asked Mr. Knab without having conducted any studies, how could he opine that the proposed retaining wall would not have any adverse effect on the floodway or the spillway of this stream. Mr. Knab stated they need to consider the way the steam has changed and the urgency in which the Taylors need to reclaim their property as it been eaten away by the erosion.

He stated they feel this is a de minimous change to the streambank; and it is not really changing the streambank at all, but is reclaiming what was there. He stated the Taylors are eager to reclaim what has been eroded from their property.

Ms. Kirk stated installation of a 7' high retaining wall creates an impervious barrier that will affect how water flows across the land into the stream; and Mr. Knab stated while it can, in this case it is protecting this particular section of the Taylor's property. Ms. Kirk asked how can he opine that there will not be an adverse effect to the actual stream, and the flow, and the spillway without having conducted any studies.

Mr. Cappuccio Objected. He stated the Plans show that in 1962 the walls were there, and they are not there today. He stated the Township authorized the change of the stream; and they could not have re-located the stream without a retaining wall. He stated when the walls deteriorate, the stream will naturally go back to where it was before; and that is what is happening. He stated they are simply putting back what was there as shown on the 1962 Plan.

Ms. Kirk stated she feels consideration should be given as to the fifty years of development as to how it affected the stream. She stated the Township needs to be assured that there is not going to be an adverse effect on the flow of the stream as a result of the construction of a 7' high retaining wall.

Mr. Cappuccio stated he disagrees with Ms. Kirk's position. He stated he feels it would be unjust for the Township to grant a Land Development Plan in 1962 which allowed for the relocation of a stream, and then years later when the walls have disappeared and the concrete has failed to say that they cannot put it back. He stated this was something that was existing and should be replaced. He stated that is all they are asking, and they are not asking to add anything new.

Mr. Zamparelli stated he understands what Ms. Kirk is saying that it was done a long time ago, and they are trying to look at it in the present time. He stated there has been a lot of development since then.

Mr. Knab stated they have obtained an E & S Permit from the Conservation District to mitigate any erosion or sediment that would occur from construction and a Stream Encroachment from DEP so it has been scrutinized at the State and County level.

Ms. Kirk stated assuming the retaining walls are installed as she looks at the pictures, it appears that the existing fence will be moved from its current location to in front of the wall. Mr. Knab stated it would move closer toward the house. He stated looking at Exhibit 4-A, it would move to the left further interior to the property, on the house side of the retaining wall. Ms. Kirk stated the fence shown in the pictures is going to be removed, and Mr. Knab agreed. Ms. Kirk stated the retaining wall will then be installed, and there will then be a new 4' high fence installed closer to the house but not along the same edge of the streambed as shown in the pictures, and Mr. Knap agreed.

Ms. Kirk asked if the retaining wall will be installed in such a way that it will be on the slope of the streambed or will it be installed at a flat area before the slope of the streambed. Mr. Knab stated there really is not a stream bank in this area; and as you can see from the pictures, it is a vertical edge. He stated it will be installed on the existing/eroded streambank in that area.

Ms. Kirk asked why they would install a retaining wall as opposed to a row of riprap. Mr. Knab stated while that would be an option, it would further extend into the Taylor's back yard which would result in them not being able to use a portion of their back yard. He stated it would create additional disturbance, and they are trying to minimize the sediment encroachment into the stream. He stated what they are doing with the retaining wall is to enhance what was previously constructed which has failed and to minimize the amount of disturbance that would occur as a result of construction.

Ms. Kirk asked how construction of a retaining wall would be reclaiming land that would be lost if they used the option of riprap along the streambed. Mr. Knab stated he stated what he is talking about is a naturalistic approach where you would widen the riparian buffer adjacent to the stream; and while you would still need to do riprap, it would allow for maximum slope percentages of three horizontal to one vertical slope which would encroach further into the Taylor's back yard as you would have to take up a wider horizontal area using riprap versus a retaining wall and that would de-value the Taylor property value by extending it into their back yard.

Mr. Zamparelli asked how much of an extension into the back yard would there be. Mr. Knab stated based on a three-one-slope and the height of the encroachment, it could be 15' to 20'.

Mr. Connors stated it would depend on the size of riprap, and he asked what they were thinking; and Mr. Knab stated he feels Mr. McIntyre would be best to answer that question. Mr. Knab stated he feels an option like that would not only create more disturbance, it would also de-value the property by taking away the usable space that the Taylors enjoy that they bought the house for.

Ms. Kirk asked how long it has been since a full retaining wall has been along the stream, and Mr. Knab stated he understands it has been years. He stated he has seen broken concrete in the bottom of the stream bank.

Mr. Cappuccio asked Mr. Knab in terms of the minimum Variance that would afford relief, would riprap, the extension Mr. Knab has discussed, and the encroachment into the stream be greater than what is proposed; and Mr. Knab stated he believes it would.

Mr. Cappuccio offered Mr. MacIntyre as an expert in Civil Engineering noting that his CV has been attached as Exhibit A-8. Mr. MacIntyre was accepted as an expert.

Mr. Cappuccio asked Mr. MacIntyre how long he has been involved in this project with Mr. Knab, and Mr. MacIntyre stated he has been involved since the beginning. Mr. Cappuccio asked Mr. MacIntyre if he was present during Mr. Knab's entire Testimony this evening, and Mr. MacIntyre stated he was and does not disagree with any of the statements he made this evening.

Mr. Cappuccio asked if the installation of the wall is necessary to stop the erosion that is currently occurring on the property, and Mr. MacIntyre agreed. Mr. MacIntyre stated since they diverted the stream, the erosion had continued to accelerate along the Taylor's property; and he believes the wall will mitigate that.

Mr. Cappuccio asked if the Taylor property has unique physical circumstances or conditions that have created an unnecessary hardship, and Mr. MacIntyre agreed. Mr. Cappuccio asked if he believes that the requested relief is necessary so that the Taylors can continue to use the property as they had when they purchased it, and Mr. MacIntyre agreed.

Mr. Cappuccio asked Mr. MacIntyre if he believes that the Taylors in any way created this unnecessary hardship by redirecting the stream; and Mr. MacIntyre stated they did not, and that was part of the 1962 development.

Mr. Cappuccio asked if the construction of the proposed retaining walls will alter the essential character of the neighborhood or the District where this property is located, and Mr. MacIntyre stated it will not.

Mr. Cappuccio asked Mr. MacIntyre if he believes the Variance, if authorized, would substantially or permanently impair the development of adjacent property or be detrimental to the public welfare, and Mr. McIntyre stated he did not think so.

Mr. Cappuccio asked Mr. MacIntyre if what is proposed is the minimum Variance relief that would be necessary, and Mr. MacIntyre agreed.

Ms. Kirk asked Mr. MacIntyre if he would agree that the flow of the stream has changed in the last fifty years since the original development, and Mr. MacIntyre stated he agrees. Ms. Kirk stated she had asked Mr. Knab about the installation of a retaining wall in lieu of riprap, and she asked why would riprap not be appropriate in this situation. Mr. MacIntyre stated the original design of the channel in 1962 had a side slope of one and a half to one, and over the years that has created an almost vertical bank on the Taylor's property. He stated if they were to add riprap, they would have to comply with modern standards of the three-to-one slope. He stated the wall that they are proposing from the ground level to the top is $7 \frac{1}{2}$ so a three-to-one slope would take that back approximately 20' into the Taylor's property to be able to abide by the three-to-one slope requirement. He stated riprap in that position is not much different than a deteriorated wall in that it can move, so it would have to be anchored in which physically creates impervious surface laying on the side so there would be an impervious surface issue. Mr. MacIntyre stated a vertical wall has almost no footprint, and the one they are proposing actually has grass that comes up to the top of it, and would allow for more of a pervious surface closer to the stream.

Ms. Kirk asked the width of the proposed retaining wall, and Mr. MacIntyre stated he believes the blocks are about 18" thick. He stated the top has a "scoop" that allows grass and soil to sit on top of the wall. Ms. Kirk stated if the intent of the wall is that it would only be one block wide, and Mr. MacIntyre agreed. Ms. Kirk stated it will not be layered in multiple blocks; and Mr. MacIntyre stated while it is, the step back of the wall would not be as flat as a three-to-one slope.

Mr. Zamparelli asked how back it takes it by stepping back the blocks as opposed to the riprap. Mr. Knab stated it is not two blocks back to back. He noted the Exhibit with the wall elevation and the picture where it can be seen that the grass is coming up to the top of the wall, but that is one block course, and it is not back-to-back block course. He stated he feels there is about a 1" stagger between blocks so the bottom block sits at the streambank and there is one underneath that which sits on a poured concrete pad. He stated as the wall gets higher, it steps back by an inch. He stated from the naked eye, it looks vertical.

Ms. Kirk stated the picture being shown appears to be a three-tiered wall right against the water, and she asked if that is what they are envisioning this retaining wall will look like; and Mr. MacIntyre agreed. Mr. Knab stated it may not be directly against the water, and Mr. MacIntyre stated there may be a bank at the bottom. Ms. Kirk stated they are proposing a tiered version of the wall being installed to reach a height of 7'. Mr. Knab stated all segmental block walls have a batter, which is related to the structural design of the wall.

Ms. Kirk stated they are stating that for stability purposes, it has to be more of a tiered version than straight up, and Mr. Knab stated it would be tiered to the extent of what is required by the manufacturer. He added that this is one wall with the batter required by the manufacturer, and the highest point will be 7'6" in the center and then tapering to existing grade on either end.

Ms. Kirk asked Mr. MacIntyre if the location of the proposed retaining wall in the same location as set on the original 1960 Land Development Plan, and Mr. MacIntyre stated it is along the streambank where the original streambank would have been had it not eroded. Ms. Kirk is this proposed wall going to be in the same location as the original 1960 wall, and Mr. MacIntyre stated it will as far as they can tell with the deterioration of where the wall was. Ms. Kirk stated based on the plan that was provided for the 1960 development, she asked Mr. MacIntyre if it is opinion that the proposed wall is in a similar location. Mr. MacIntyre stated from the Plan it looks like it is just at the very corner of the stream, but there are no dimensions. He stated it does not indicate from the Plan whether it was a concrete or masonry wall. He stated from the Plan it appears that it was at the bend, but he is not sure exactly what was constructed. Ms. Kirk stated looking at the Plan and the proposed wall, she asked if it is in a similar location. She stated the original wall was not on the other side of the property along the streambed is what she is asking. Mr. MacIntyre stated the curve/bend would be to the left side of the Plan; and as it comes around, the proposed wall would be on the same side as the outer wall of the curve.

Ms. Kirk asked if there will be fill added to the property once the retaining wall is installed as there was a comment made about reclaiming the land that was lost by the erosion. Mr. MacIntyre stated there is stone backfill behind the wall itself as constructed, the very top will have topsoil, and the fence will be there as well. Mr. MacIntyre stated they are trying to reclaim 3' to 4' of their land which was eroded out of the back corner.

Mr. Solor stated the actual turn in the stream is upstream of their property line, and he asked what is to prevent continued erosion upstream of their property from eventually undermining the end of this retaining wall.

Mr. MacIntyre stated the proposed retaining wall is curved in so it allows the flow to come and be guided. He stated when they discussed this with the Township engineer, one of the Township engineer's comments was to make sure that it allowed for a flow and not an eddy to swirl in that location so that it would minimize any chance of further erosion. He stated without armoring it, there is no way to actually stop it from eroding and the Taylors cannot put a wall on someone else's property.

Mr. Connors stated there is no topography on the Plan so it is hard to tell what is going on outside of where they are placing the wall. He stated he sees a 5' return that goes into the property. Mr. MacIntyre stated that is the downstream end, and the flow is going to go from left to right on the Plan. Mr. MacIntyre stated they are going to keep some of the bank, and once it gets to that point, the wall will dovetail into the existing streambank and continue. Mr. Connors asked what is the topography of where they are placing the wall, and Mr. McIntyre stated it is almost a vertical. Mr. Knab stated the Township engineer has seen the Grading Plan. Mr. Connors stated they have placed the wall along the edge of the cut, and Mr. MacIntyre agreed.

Mr. Cappuccio stated you can see the vertical drop they are discussing in 4B.

Mr. Knab stated the intent of installing the wall was designed for the most minimal place possible. He stated it can be seen in the picture where the tree stump is, and it is undermining the topsoil and that section of the streambank. He stated further down the erosion is not present, and it is more of a stabilized streambank.

Mr. Connors stated in the picture shown, the toe of the retaining wall is at the edge of the water or where the fence is; and Mr. MacIntyre stated it would be at the edge of the water. Mr. MacIntyre stated everything being seen would be wall and backfill.

Mr. Solor asked the 100-year flood elevation at this location. Mr. MacIntyre stated the entire property is in the FEMA floodplain. Mr. Connors stated a majority of the property is in the floodway. Mr. Connors stated the elevation he had was 131, and Mr. MacIntyre stated 132 is about at the top of the wall. Mr. Connors stated the top of the wall is at 132, and they will have fill behind the wall. Mr. MacIntyre stated they are not raising the grade. Mr. Connors asked what is the grade that there is there now, and Mr. MacIntyre stated it is 132. Mr. MacIntyre stated in that area, their back yard does slope toward the stream so it will flow over top of the wall.

Mr. Solor asked if the wall is designed to take the 100-year flood and the corresponding velocities and flow force, and Mr. Knab stated it is. Mr. Knab stated they have provided to the Township engineer the signed and sealed structural drawings. Mr. MacIntyre stated they had an outside consultant do the wall for them. Mr. Cappuccio stated they received a letter from the Township engineer with a review, and it is mostly "will comply;" and they are in that process right now. Mr. Cappuccio stated the Township engineer's review letter was in October.

Ms. Kirk stated neither she nor the Board have seen that letter which would have helped with this review. Mr. Cappuccio stated he has a copy of the letter from Remington Vernick Engineers, and this was marked as Exhibit A-11. He stated there is also the new response letter which was sent on October 21, and that was marked as Exhibit A-12.

Ms. Kirk stated she feels there needs to be clarification since Exhibit 3 shows the configuration of the wall differently than the original Application dated September 7 that was submitted with the Application. She added she believes that the re-configuration was in response to a comment that the Township engineer indicated that the location of the wall could adversely affect the adjacent property by creating a whirlpool effect. She stated it was not pointed out that the configuration has been modified and amended based on the Township engineer's comment. She stated if Mr. Cappuccio would elicit that Testimony, she feels it might be helpful. Mr. Cappuccio stated

Ms. Kirk is correct in that when the review letter came out, there were questions; and Mr. McIntyre had discussions with the Township engineer, and Mr. Knab may have as well. He asked Mr. MacIntyre to discuss the reconfiguration in the one spot on the wall.

Mr. MacIntyre stated the Township engineer was concerned that there would be a whirlpool effect at one location and accelerate erosion in that corner; and to help alleviate that, they have arced it to allow the flow to come across the wall face more cleanly.

Ms. Kirk noted Exhibit A-11, the original Plan; and in Exhibit A-3 there is a greater arc to the wall with the leg on the opposite side than what it was. Mr. MacIntyre agreed.

Mr. Connors asked Mr. Pockl if he is satisfied with what has been submitted. Mr. Pockl stated he is satisfied that it will work from an engineering standpoint. He stated other Testimony was provided tonight that he would disagree with.

Mr. Pockl was sworn in at this time.

Ms. Kirk asked Mr. Pockl his position with the Township; and Mr. Pockl stated he is Project Manager for Remington Vernick Engineers, which is the Township engineer. Mr. Cappuccio had no Objection to Mr. Pockl testifying in his capacity as Township engineer.

Ms. Kirk asked Mr. Pockl if he had reviewed the original Plan and the subsequent revisions that have been submitted for this Application. Mr. Pockl stated they reviewed the original Plan. He stated a sketch of the subsequent retaining wall lay-out was provided to him via e-mail, and he reviewed that and indicated that he found that lay-out to be acceptable. He stated he also received structural retaining wall drawings that they are in the process of reviewing right now.

Ms. Kirk stated she understands that Mr. Pockl's review required the Applicant to obtain appropriate letters from other agencies such as the Bucks County Conservation District and the PA DEP for this project, and Mr. Pockl agreed. Ms. Kirk asked Mr. Pockl if he has seen those letters, and Mr. Pockl stated he has not. Ms. Kirk asked Mr. Pockl if he was told that those letters were issued indicating that the proposed Plan is acceptable, would he find that satisfactory per his review; and Mr. Pockl agreed.

Ms. Kirk stated Mr. Pockl indicated that he heard the Testimony tonight, and Mr. Pockl agreed. Ms. Kirk asked Mr. Pockl if he has any opinions as it relates to the proposed Plan based on the Testimony heard. Mr. Pockl stated the Structural Plans that were submitted indicate that the only the top layers of the retaining wall have a block thickness of 28" and not 18" so it will be 10" deeper than what was Testified. He stated the first top three courses of the wall will be 28" block, the middle two courses of the wall would be 41" thick block, and the bottom two courses of the wall would be 60" thick block. He stated underneath the bottom course of block on the wall there would be some kind of prepared footing whether it would be prepared soil, or stone, or concrete that would have a larger width. He stated behind the retaining wall, he believes they indicated that there is a drainage layer of stone that would probably be approximately 12" thick behind that, and also a representative cross-section on the Structural Plan indicates that there will be aggregate backfill that is compacted a one-to-one slope from the bottom of the wall back into the property. He stated it would be finished on the top with topsoil and lawn; but from a construction standpoint, the amount of disturbance into the Taylors' property seems to be significantly more than what he believes was testified to earlier.

Mr. Knab stated the retaining wall shown on the Plans shows the 28" as the smallest dimension, and the lower segments are larger as Mr. Pockl has noted. He stated it is extending into the Taylors' property, and they are not misrepresenting anything from that standpoint. He stated it is finished with lawn, and it is shoehorned back into the property. He stated they are not extending out further 60" into the stream, and the wall face that is shown on the Site Plan will be the location of the wall face as installed.

Mr. Connors stated the B60, the base layer, is the foundation that was discussed earlier, and there is no poured foundation underneath that, and that would be the first run. Mr. Knab stated he believes that in this circumstance because of the concerns for the flow of water being so significant, the prepared base was a poured concrete base that would be below grade. Mr. Pockl stated that is consistent with the structural drawings that were submitted.

Mr. Pockl stated he would question that the segmented block retaining wall is the best, and he is not sure if other more natural alternative design measures apart from riprap could be used to stabilize the embankment. He specifically noted coir logs, tree root wads, and stabilization matting that

could be installed at a slope face that would be more vertical than three-to-one that would be a more natural solution and would be less intrusive than riprap onto the Taylor property.

Mr. Connors stated he is assuming that they chose the block because it is architecturally pleasing. Mr. Knab stated while that is true in part, the main concern was the flow of water and that the stream was re-directed. He stated it is hitting this corner of the property almost dead-on. He stated the Taylors love their home and their property, and they are investing a significant amount of money on this; and they want to make sure that they are protecting their back yard from what they lost and that it does not happen again.

Mr. MacIntyre stated as an engineer, he would prefer to see a more armored measure than coir logs or tree roots. He stated there were probably tree roots there before, and they are gone. He stated he feels the armored condition will be much more sustainable.

Mr. Cappuccio stated it can be seen from the photographs that the tree had to come down; and they were told that in a storm, it could have hit their home or a neighbor's house. He stated the stream eroded the tree roots of that large tree.

Ms. Kirk stated the Township is not Opposing the Application, but she has been directed to participated which is to insure that the Zoning Hearing Board has been equipped with all of the information because once the wall is up, the Board may be in a position where people may start complaining that the stream or the flow was diverted. She stated her questions were geared to insure that this is the least intrusive, minimal relief necessary to help the property owners.

Mr. Connors stated his issue was there was no topo provided so that he could see exactly what is going on.

Mr. Zamparelli stated he would also like to have heard from someone else to help the Board determine the difference between the natural solutions and the blocks that have been proposed. Mr. Zamparelli stated he does not know how the velocity of the flow will be changing with the wall as opposed to if it were more natural. He stated he understands that with the riprap, they would have lost more of the yard, but he would like to know how the flow will be effected if they do not do that, and if that will make a difference downstream or across the street.

Mr. Knab stated it is important to add that they are not re-directing the stream at all, and the stream bottom is the same as it was since it was originally re-directed to build the property. Mr. Zamparelli stated putting up a wall is going to have an effect on the way water hits it as opposed to a more natural environment. Mr. MacIntyre a more natural bank would actually slow the water flow which could actually cause it to rise. Mr. Pockl stated he would agree with that.

Mr. Solor stated there is a trade off since the faster the water the goes, it does bring more water downstream.

Mr. MacIntyre stated in this particular location, if you come around the other wide of the Taylor property, there is a culvert underneath David Terrace; and that is the controlling factor of anything upstream of that.

Mr. Connors asked if Mr. MacIntyre believes that the wall being proposed will not impact the velocities of the existing stream, and Mr. MacIntyre stated he does not believe so.

Ms. Pamela VanBlunk and Mr. Henry VanBlunk, 1514 David Terrace, were sworn in. Ms. VanBlunk stated they live directly across the street, downstream. She stated the stream runs behind the Applicants' yard and then along the side. She stated she is across the street, and it runs along their side as well. She stated they support the Application as they have seen what it has done to the Taylors' back yard. Ms. VanBlunk stated these are not large Lots, and to lose a significant portion of the back yard has a serious impact.

Mr. VanBlunk stated he feels the wall is the better alternative. He stated when there are heavy storms, this creek increases in height from almost at trickle to about 8' in height from behind the Taylors' property to along his property almost to the woods behind the Middle School. Mr. VanBlunk stated he knows that the property owners adjacent to the Taylors have been talking to Mr. Majewski for years wanting the Township to build them a retaining wall, but the Township advised them it was their problem. He stated the Taylors are asking to fix the problem, and he supports them.

Mr. Zamparelli asked about the run-off from the Taylor property. Mr. MacIntyre stated there is a slight pitch in the Taylors' back yard, and the water will flow over the top of the wall. Mr. Knab stated Mr. MacIntyre had also mentioned that if the water does not go over the wall, it will most likely infiltrate through the grass layer, get into the drainage stone behind the wall, and get out to the stream.

Mr. Zamparelli stated he is in favor of the wall and feels it looks nice. Mr. Dougherty agreed.

Ms. Kirk again stated that the Township is not opposing, but they know that at some point someone will say there was a diversion of water, and they will ask if the Zoning Hearing Board did their due diligence in reviewing this. Mr. Zamparelli stated he believes that they are.

Mr. Cappuccio Moved for the Admission of the Exhibits, and there was no Objection.

Mr. Solor moved, Mr. Connors seconded and it was unanimously carried to approve the Appeal as submitted with the Plans subject to approval of the Township engineer.

APPEAL #21-1945 – CRYSTAL & JOHN HOWE Tax Parcel #20-059-272 1373 COLONY WAY, YARDLEY, PA 19067

Ms. Crystal Howe, Mr. John Howe, and Mr. Nathan Simcox, Hydroscape Pools, were sworn in.

Mr. Flager marked the Exhibits as follows: The Application was marked as Exhibit A-1. The Site Plan was marked as Exhibit A-2. The Proof of Publication was marked as Exhibit B-1. The Proof of Posting was marked as Exhibit B-2. The Notice to the neighbors was marked as Exhibit B-3.

Mr. Simcox stated they are looking to put in a fiberglass pool. He stated he submitted the topographical with the engineering. He stated they are trying to go from a little over 19% of existing impervious to slightly above 24%, and will get back to 18% with an infiltration trench. Mr. Simcox stated the total proposed impervious surface is 24.6%. Mr. Pockl stated the pool water surface is 450 square feet, but in Lower Makefield, we do not consider the pool surface water as impervious surface; and he believes the total proposed impervious area will be 24.6%.

Mr. Zamparelli asked if there are any dimensional issues, and Mr. Simcox stated there are not. He stated it is a typical pool with the added impervious for capturing the water for what would cause additional run-off.

Mr. Zamparelli asked where the equipment is going. Mr. Simcox stated it will be in between the shed and the house.

Mr. Zamparelli asked how close is the pool to the rear setback line, and Mr. Simcox stated it is more than 10' which is standard.

Mr. Solor stated in the impervious calculations it says that the patio is pervious, but on the Plan it says that the patio is designed as impervious. Mr. Simcox stated the existing patio that is there is impervious, and a Variance was not needed to compensate for water run-off; but the patio they are adding is the additional. He stated it is the pool decking that is going to continue from the existing patio to surround the pool. He stated the topographical people who came out did the original Plan thinking it was impervious, and no one corrected that, and it was taken away from the calculations, and the only thing that has been added is what they are going to add which is the stamped concrete. He stated that should be compensated to go up the 5% and get back down to 18% with the infiltration trench.

Mr. Zamparelli asked if the infiltration trench is large enough, and Mr. Pockl agreed.

Mr. Solor asked if the 1' coping could be considered pervious. Mr. Simcox stated it is impervious, but it is part of the decking. He stated the surrounding 4' includes 1' of coping and an additional 3' of decking to make the 4' surround. He stated that is from inside water edge to inside water edge that has been removed for the existing water surface. Mr. Zamparelli asked if the calculations include the 1', and Mr. Simcox stated it does include that. He stated regardless of what you coped that with, you would put concrete there, and that would not accept water.

Mr. Solor stated he feels there is a slight discrepancy in the calculations because they have 800 square feet of the pervious patio, but the calculation on the drawing says 706' of paver patio and 94 square feet of coping.

Mr. Solor stated under the calculations they have patio pervious 800 square feet and on the drawing itself they have the arrow to the proposed paver patio and coping listed as 706 plus 94 equals 800. Mr. Simcox stated it would be 800 square feet in total. Mr. Solor stated they just established that the 94 is not pervious so it should be 706 pervious. Mr. Simcox stated they are both impervious. He stated 706 plus 94 would be 800 in total that would be impervious. Mr. Simcox stated the existing patio are the squares beyond

the Pool which attach to the house, and that is the pervious patio that was previously installed, and that has nothing to do with this. He stated that square footage does not affect the overall impervious; and what they are going to add will be the coping and the surround which totals 800 square feet which is the 24.6%.

Mr. Solor asked Mr. Pockl if they know that the existing patio is pervious by the Township's definition, and Mr. Pockl stated he has not seen the patio and does not know what the cross-section is.

Mr. Simcox asked if there is any documentation. Mr. Howe stated they had the patio done about a year and half ago, and there were Plans done to be pervious and they did the soil and water run-off, and "all of that stuff" prior and they went through the Permits a year and a half ago to have that done the correct way. Mr. Simcox stated that is documented that it was Permitted by the Township, and Mr. Howe stated they went through the Township. Mr. Howe stated they have an e-mail from Michael Kirk from the Township for Building Plans for the patio, and he inspected the patio after it had been installed.

Mr. Zamparelli stated he feels if they make a Motion they should include this somehow.

There was no one from the public wishing to speak on this issue.

Mr. Dougherty stated they could get clarification from the Township engineer regarding the existing patio and where it fits into the impervious numbers.

Mr. Solor stated given that they already have the patio which is adjacent to the pool, do they really need the surround designed to that extent particularly on the side where it faces the patio. He asked if the pool could not just be pulled up tighter to the existing patio so there is less impervious. Mr. Connors stated he would rather have a solid surface around the pool so that there is not mud coming up through everything, and it would be cleaner. Mr. Simcox stated the side closest to the existing patio is only 4' of walk-around, and the added space was going to be to the side of the pool. He stated the design of the pool has a side step and a side seat entrance so everything would be to the right of the pool if there were going to be additional space for chairs, etc.

Mr. Connors moved, Mr. Dougherty seconded and it was unanimously carried to approve the Appeal as submitted with an infiltration trench with impervious surface of 24.6% to be reduced to 18% impervious and clarification from the Township engineer that the existing patio is considered pervious.

There being no further business, Mr. Zamparelli moved, Mr. Connors seconded and it was unanimously carried to adjourn the meeting at 9:45 p.m.

Respectfully Submitted,

Matthew Connors, Secretary