



Lower Makefield Township encompasses the northwestern quarter of the Township; and is the area near Dolington Estates, Lindenhurst Road, Memorial Park, and Yardley Run. He stated that general area drains into Core Creek which eventually goes under 332, out to Silver Lake, and eventually to the Neshaminy Creek. Mr. Majewski stated they started this Plan five years ago, and it took about five years to adopt the Plan. He stated at that time the Township also updated their Ordinance to incorporate a lot of the newer requirements in the Delaware River South Ordinance.

Mr. Majewski stated now that the Plan for the Neshaminy Creek Watershed is adopted, the Township is mandated to adopt the Ordinance that will enforce the recommendations in the Plan. He stated he has taken the draft that Bucks County Planning Commission had provided, and modified it slightly to make it specific for Lower Makefield, and made a few minor changes to definitions that were inconsistent with the State laws. He stated he also added in two features under infiltration at the recommendation of the EAC. He stated one was to require that some pretreatment be given to the stormwater that goes into underground infiltration facilities to reduce pollutants. He stated the other is that they should perform a groundwater analysis whenever infiltration facilities are located near buildings. He stated whenever you are introducing a lot of water into the ground, if you have a high water table or poor soil conditions, if you put too much water into one location, the ground water will actually rise up and go sideways and could negatively impact existing houses. He stated there is a simplified formula that USGF came up with that will allow you to put in some numbers and do a quick and easy analysis to determine whether or not there will be a problem.

Mr. Majewski stated this 102 page document is similar to what they had previously, but has clarified some items that have come up in previous plans including who has to do a full Plan and full-scale calculations and when you are exempt from doing a full Plan and could do just some simplified calculations. Mr. Majewski noted Page #7 of the Ordinance clarifies the exemption thresholds which are based on the amount of impervious surface. Mr. Majewski stated the numbers they came up with are tied into different Permits that are required at the State and County levels. Mr. Majewski stated the Bucks County Conservation District requires that Plans be submitted whenever earth disturbance is greater than 1,000 square feet, and this is why they came up with 1001 square feet to be the threshold for when you need to prepare a Plan. He stated when you get over 5,000 square feet, this is a State threshold for when a Plan is required for stormwater management; and this is the other threshold for whether or not a Plan is exempt or not exempt.

Mr. Majewski stated one of the other changes that was made in the Ordinance from the last version is the requirement for controlling the volume of water that leaves the site. He stated previous Ordinances only addressed how much water is coming out when you have a big flood, but there are a lot of smaller little floods that can do damage to streams more often than a big flood. He stated they came up with a criteria that you needed to

handle the total volume of run off that is generated from the two-year storm which is approximately a 3.3” rainfall, and this encompasses approximately 98% of the rainfall events that happen. He stated anything over that is a more rare storm; and this is also handled in the Ordinance, and you have to also control the run off from larger storms.

Mr. Majewski stated the EAC recommended to the Board of Supervisors that they should also update the Delaware River South Watershed Ordinance to incorporate some of the newer features. Mr. Majewski stated that Ordinance is essentially the same as the one provided to the Planning Commission but has Delaware River South Watershed substituted for where it says Neshaminy Creek. Mr. Majewski stated the Township must adopt the Ordinance by May 22.

Mr. Bush asked if the changes to the Delaware River South Ordinance were those which impact the threshold for exemptions as well as the infiltration that he just described; and Mr. Majewski stated that is the one thing that will not change because the Delaware River South Plan had numerous calculations, and it is recommended that they continue with those until they change that Act 167 Plan. This relates to the thresholds for the exemptions, and the infiltration changes will be the same as in the other Ordinance.

Mr. Alan Dresser, EAC, provided a memo to the Planning Commission this evening which includes his comments about this matter and his strong support for the Ordinance. He stated the County’s model Ordinance is just the minimum requirements the Township has to meet, and the Township can go beyond these; and Mr. Majewski has done this by adding certain items.

Mr. Dresser suggested adding the following as 174-16(K) “Run off volume shall be calculated separately for each of the sub areas with different Runoff Curve Numbers (CN) values, no weighting of CN values.” He discussed the term Curve Number, and stated the use of weighted CN values instead of individual CN values will significantly reduce the estimated amount of runoff from a watershed which will result in insufficient stormwater management controls and inadequately designed stormwater management facilities. Mr. Dresser stated what he has suggested is supported by the PA BMP Manual. He stated it is noted that it is especially problematic when there are pervious and impervious combinations, and this could result in an under-estimate of the run off. Mr. Dresser provided an example using the equation in the Ordinance under Section 14-A showing that there is a problem with averaging the CN values.

Mr. Majewski stated he feels he could address this with appropriate wording and agreed that there are instances where it does make a difference.

Mr. Dresser stated it appears that there is no requirement for an underground infiltration basin to infiltrate the water over a certain period. Mr. Majewski stated an infiltration basin stores the water and slowly infiltrates it so this would be covered. Mr. Dresser stated he was concerned that it only applied to “open area infiltration basins,” and Mr. Majewski agreed to look into this.

Mr. Dresser stated they should also define TSS as “total suspended solids.”

Mr. Bush moved, Ms. Friedman seconded and it was unanimously carried to recommend to the Board of Supervisors approval of the update to the Neshaminy Creek Watershed Stormwater Ordinance subject to recommendations in the 4/11/11 memo from Alan Dresser of the EAC.

Mr. Bush moved and Ms. Friedman seconded to recommend to the Board of Supervisors approval of the update to the Delaware River South Watershed Stormwater Ordinance subject to recommendations in the 4/11/11 memo from Alan Dresser of the EAC.

Mr. Smith asked the costs of following this, and Mr. Majewski stated this is difficult to calculate, but it should save the Township money. Mr. Smith asked if they are behind other Townships in this regard. Mr. Majewski stated everyone had six months to adopt this; and while some Townships adopted it immediately, Lower Makefield wanted to take the time to look thoroughly into this before recommending approval, and they have added some things to make it better. Mr. Smith stated he feels Lower Makefield is a leader in stormwater management as opposed to other Townships, and Mr. Majewski agreed generally but stated that the adoption of stormwater management in the watershed areas is mandated by the State. Ms. Friedman stated she feels they embrace the EAC’s analysis and opinions at a higher level.

Motion carried unanimously.

#### OTHER BUSINESS

There was discussion on the upcoming Aria matter before the Zoning Hearing Board.

There being no further business, Ms. Friedman moved, Mr. Bush seconded and it was unanimously carried to adjourn the meeting at 8:20 p.m.

Respectfully Submitted,

Tony Bush, Secretary

