

Supplement to the Drainage Project Memo by Ron Thomas, April 24, 2023

- Q. We remain puzzled by the removal of the northern and southern berms, given the impact that they have had in preserving our dunes during nor'easters. We have watched the dunes in Bethany, Sea Colony, and South Bethany destroyed during these past storms and we have watched as both Bethany and South Bethany have had their dunes replenished while ours have not needed replenishment.
- A. Mike Jandzen is the owner and founder of Aquatic Marine, LLC; and a former resident of MBA. He is a subject matter expert on dunes, beaches and beach walkways; and he supports statements made by representatives from DNREC. Both stated the berms on the north and south ends of our community have had no impact on preserving our dunes during nor'easters or other storms. MBA has obtained the necessary permits from DNREC to remove the berms and use the sand to bolster our existing dune line. During the permitting process, it was learned that the berms were an unintended consequence of efforts to limit encroachment on to our beach from SBB and Sea Colony. This was confirmed by Jennifer Pongrantz from DNREC.

The initial line of privacy fencing eventually became covered by sand. A second line of fencing was then built on top of the first line. This process continued until we have the very large mounds we see today. The Board decided the prudent course of action is to follow the recommendations of subject matter experts.

Mike Jandzen says there are several factors that have resulted in Middlesex Beach doing well in storms while our neighbors suffer. Among other things, SBB has built its homes east of the "dune line." The high rise buildings at Sea Colony do not allow a western wind to reach the ocean. According to Mike, both of these factors have a significant impact to beach and dune erosion in those communities.

- Q. You chastised "former Board members" who have reached out to Lyndon concerning the ditch work. I have not called nor talked with Lyndon but I have let it be known that that I would like to talk to him. I would like to know what tectonic shift has occurred in the MBA topography. When I was on the Board, he stated that widening, deepening or expanding our ditches would be a waste of money. You and the Board have stated that he provided a different answer and I wanted to know why Lyndon has changed his opinion. The purpose of my intended outreach was not to interfere in the contract, as you suggested. Although I have not called or talked with Lyndon, I would still like to have the discussion with Lyndon as would some of the past Board members. Lyndon owns a company that serves the general public and no one should need the Board's permission to reach out to him.
- A. When Lyndon Hitchens met with you to assess the drainage situation on Bayberry Rd in 2017, you were a prospective customer for his business. Lyndon listened to the voice messages he recently received from a former Board member. He heard the caller say it's "us vs them." The caller also provided your name and telephone number and asked Lyndon to call you directly. Two property management companies and counsel advised it was inappropriate for community members to directly

contact HOA contractors. Lyndon advised me that no community member called him directly about a community project in over 30 years of work. Hence, my comments.

Ron had previously asked Lyndon for his feedback on the following comment you made in your drainage summary memo:

Lyndon Hitchens strongly suggested that we bury the ditches for better performance. Lyndon indicated it would be over \$100K per side of the street (you were still waiting on an estimate from him).

Lyndon said he attempted to explain to you the reasons why an open ditch is a much better (and less expensive) option than "burying the ditch" (in an environment like ours). He stated you directed the conversation to consider only the option of burying the ditch. Lyndon expressed to Ron he would be "hard pressed" to believe he ever told you it would cost over \$100K per side of the street. Lyndon provided Ron with the proposal he provided to you shortly after your meeting. That proposal (to bury the ditch) was \$71K for the south side of Bayberry. Lyndon does not want to "get in the middle" (his words) of a "us vs them."

- Q. The Board has not been transparent with the anticipated cost of the proposed ditch work (what has been spent and what the plans are for further expenditures). Cobbling together the information indicates that the project might cost \$500,000. This is approximately \$2,000 per property. This is a significant amount of money to be spent on a project where success is deemed to have occurred when there is water in the ditches.
- A. The Board has stated in Board meetings on multiple occasions the cost of both Bridge and Bayberry Rd drainage projects. Ron Thomas announced in the September 2022 community meeting the subject of drainage work would be discussed at the October meeting. He encouraged anyone with questions or concerns about the project to attend that meeting. Ron also stated in the community meeting the anticipated cost of the Bayberry drainage work is \$80K. The Board has stated on several occasions the intention is to eventually do the same work on Short, Errett, Addy and the north side of Evergreen. Your last sentence left out two important aspects to what Ron stated in the Town Hall. "Water in the ditches" is what we expected to see. Because it cannot be proven how much of that water is from runoff versus the water table, the true measure of success is the elimination or significant reduction in standing water on private property. Ron also stated another important measure of success is no longer seeing water coming across the roads during heavy storms.

Q. We are not aware of any engineering study that supports the current and proposed ditch work. The Board appears to have initiated this project without the appropriate engineering study.

A. Lyndon has explained to Ron the Town of Bethany Beach paid for engineering studies on several occasions (to verify the completeness and accuracy of his work). In every instance, there were no deficiencies found. For this reason, the town decided to stop "wasting money" and no longer pays for these studies, which exceeded the cost of the work itself in many instances. Ron has reached out to Brett Warner (Director of Public Works) to verify this. You agree that an experienced and well-respected excavating company was hired to complete the work. DNREC was also consulted.

As stated at the last meeting, the Board will consider an engineering study. However, I'm not aware of an outside, independent engineering study by any Board who previously considered MBA drainage

issues. Everyone reached the same conclusions on the work that needed to be done. Carl Swanson in February 2001 wrote:

"Even if the drainage from Middlesex is not improved, we can improve the appearance of the community and reduce the amount of standing water in the ditches.

- a. Establish a uniform grade for all the ditches within Middlesex Beach from Beach Plum Road to the end of Middlesex rights-of-way.
- b. This work would include some minor ditching, filling in of ditches at appropriate locations and raising and lowering of some culverts on individual driveways."

Q. What will happen when Assawoman floods? Will the proposed ditch work flow this water into MBA?

A. DelDOT will not complete infrastructure upgrades to the west of MBA unless they determine (via elevation surveys) the work will have the desired effect. For this to happen, there needs to be a sufficient elevation drop from Kent to the Assawoman. For water to go from the Assawoman to the western end of MBA, it would therefore, be going uphill (over a roughly half mile stretch). This simply cannot happen. When the Assawoman floods in a severe weather event, the entire area will flood. It will have nothing to do with the existence of a properly installed drainage network in MBA.

Q. We have been repeatedly told that our ditch work is being done because the ditches on Kent Ave will be fixed.

A. I have stated in meetings and by email that the project is a worthwhile effort, even if a Kent Ave solution isn't found. Per an email blast sent to the community on 5/3/22:

Drainage has been a long-standing challenge in Middlesex, particularly on the Pine Side. Efforts over the years attempted to keep the ditches clear; however, adequate ditch maintenance requires annual work to keep them clear of organic material. Insufficient care gradually decreased the depth and width of the ditches that inhibited water movement and, more importantly, the ability to hold water.

It is essential to note the primary purpose of the ditches is to hold water temporarily. Water in the ditches will eventually evaporate into the air, sink into the ground, or drain to Kent Avenue. Inadequate ditch width and depth in many areas results in significant flooding on the Pine Side of Middlesex, with water overflowing into yards.

Under the purview of the Community Facilities Committee, several experts (including DNREC) were consulted about potential drainage improvement solutions. This effort resulted in a contract with LH Excavating ("LH") to perform all necessary drainage remediation activities on Bridge Road. LH identified eleven culverts under driveways are broken on Bridge Road alone. The combination of many broken, bowed, and clogged culverts with ditches that do not match the depth of the culverts results in an inability for water to move westward. In addition, there is significant inconsistency in the amount of water held in the ditches in front of individual homes. Numerous properties contain only a slight indentation in the ground or no ditch at all. Variability of the ditch size occurs on each of the streets on the Pine Side.

In fiscal year 2021/2022, the Board approved a budget reallocation of \$75,000 to conduct ditch reconstruction for the north and south sides of Bridge Road. Broken culverts will be replaced. Ditch depths will be adjusted along both sides of the road. Work commenced the week of April 25th with completion expected by May 15th. LH is making all efforts to ensure the newly laid Comcast cables are not disturbed.

We acknowledge the ditches along Kent Avenue remain problematic and are a persistent issue. MBA will seek to partner with our neighboring communities to motivate the Delaware Department of Transportation to perform due diligence and clean out the clogged ditches along Kent Avenue to allow faster water flow out from Middlesex.

Recognizing our need to consider a variety of remedial actions, the Landscaping Committee will investigate if plant material that is highly water absorbent could also provide some flooding relief.

Upon completion of the project, all homeowners will share equally the responsibility of holding water in front of their property on Bridge Road. To determine the effectiveness of the repaired ditches, we will carefully note the difference in water flow and yard flooding over the coming months and years.

Please note the community was notified in the email blast as to the cost of the Bridge Rd work and that the work was NOT being done on the promise Kent Ave will be fixed.

Q. Does the Board have any proof that this work is actually going to be done?

A. The Board has been very clear in all of the many communications to the community about work to our west. DNREC has now agreed to complete a survey of Kent Ave from Sea Colony to South Bethany for the purpose of exploring options.

Q. If this work is done, will our existing ditches have been sufficient in removing water from the community?

A. I refer you to a Facebook post from Alex Sella posted on 2/11/23:

The aerial and geographic maps they (DNREC) brought to the site walk demonstrated that the ditches flowed properly without any additional work in Middlesex. Their only advice was to replace any pipes that collapsed and keep them clean.

I also refer you to an email written by you to the Board on 5/8/22:

The aligning of the culverts, removing organic debris, especially at the west end of each road, removing trees (including their roots) removing other vegetation that hinder water flow; and the leveling of ditches will help.

I read Alex's post to Lyndon Hitchens to hear his perspective. He stated aerial and geographic maps will not show any of the broken or improperly installed culverts along the road. He said they also don't show the poor condition of the ditches themselves. LH replaced 16 broken or improperly installed culverts on Bridge Rd. and 20 on Bayberry. There were also two improperly installed pipes

(not to be confused with culverts) on Bayberry Rd. In addition, the ditches on those streets had been gradually filled by composted leaves and pine needles after decades of inadequate maintenance. In many other areas, the depth of the ditches was either higher than the depth of the corresponding culverts or 12-18" deeper than the culverts. A walk down Errett or any of the other non-completed streets will clearly demonstrate much more of the same. Ron is available to show any member the condition of the ditches and culverts in need of repair. He also can share a video he recently took demonstrating yard flooding on Errett Rd after a 1" rainstorm. The video shows nonexistent ditching near the yard and improperly installed culverts near it.

- Q. There was a comment, from the Board, that our proposed ditch work will flood Kent Ave. This will force DelDot to address the ditches on Kent Ave. This might be true but, if true, that means the western MBA lots will be turned into retention ponds. Is there an engineering study that can satisfy the western MBA property owners that their lots will not be underwater more often and longer, when rain is channeled from the eastern lots?
- A. Ron met with Lyndon shortly after the Town Hall to discuss this question. He also met with the homeowner at 1 Errett at his home to look at the elevation of the ditch in comparison to the elevation of his back yard. Lyndon believes the future completion of drainage work on Short and Errett Rd. will in no way increase yard flooding as a result of the ditch work on those roads. The excess water in the Kent Ave ditch from Errett and Short will flow northward to ditches located on the Sea Colony property.
- Q. Ron did not prove that the water in the ditches was run off or was simply the result of the high water table.
- A. Some of the water is from the water table. The better measure of success is the significant reduction or elimination of standing water on private property as well as the elimination of water over the road bed from one side of the street to the other. As has been explained previously, several factors (including new home construction, piping from home downspouts into the ditches and global warming) are expected to place additional strain on our already inadequate ditch infrastructure.

Q. It was also stated that the new ditches would also help with the mold. Is there any proof to the accuracy of this statement?

A. There is a wealth of information available about mold and its cause. For instance, "Crawl spaces are the perfect place for mold to grow. The location and environment of crawl spaces invites mold formation. Mold spores are already in the air. They just need material to cling to, a moist, humid place, and mild temperatures to thrive."

I refer you to an email you sent to Chuck Taylor (and copied the Board) on 5/6/22:

The properties at 21, 23, and 25 have never had standing water that requires a drainage system. The vegetation that currently exists does an excellent job of absorbing rain water. If there was a ditch installed, it would redirect rain water that is naturally absorbed on these properties, to the properties that lie west of our property. This plant life absorbs water that is naturally absorbed on these properties that lie west of our properties that lie west of our property. A ditch would also eliminate a significant amount of plant material at 23 Short Rd. This plant life absorbs water that will now be redirected westward adding to rather than solving the problem of standing water at the western edge of Short Rd.

Is there any proof you can provide to support the accuracy of this statement?

- Q. A current Board member stated that past Boards simply kicked the can down the road and did not address the ditches. All previous Middlesex Boards did not "kick the ball down the road" as was incorrectly stated during the March 16th meeting. Years ago, one Board did exactly what LH is doing now for ditch maintenance work. The board contracted Melvin L. Joseph Construction Company to scrap out, not dig out, the ditches. Melvin L. Joseph is a highly respected company in Sussex County since 1940. (Rt.113, Georgetown). Melvin L. Joseph used a piece of equipment called a "Gradall" which traveled along the edge of the road with a boom and a bucket that scraped out the ditches. The bucket was the same type of bucket that LH uses today. LH's machine is newer and more sophisticated but the Gradall and LH's machine performed exactly the same function for cleaning out the ditches.
- A. The statement was not addressing general ditch maintenance, but an overall project to repair and restore the drainage ditches and culverts in MB was not undertaken until now.

You acknowledge that Lyndon and LH are acknowledged experts in drainage work in Sussex County. The Board hired him to do the work.

LH work is different than what you describe. LH shoots the grade, uses their equipment to dig the ditches and make sure the ditches are at a consistent depth and grade. Finally, they utilize their machinery to ensure the culverts and pipes are installed properly.

Q. MBA retained various companies to clean and maintain the ditches. While I was on the Board we hired several different companies and also deployed our two part time facilities employees to clean and maintain the ditches.

A. Per your drainage summary memo, McCabe and Sons Landscaping (MSL) was hired over a 9 month period to "improve the outflow." Your memo stated, "after several attempts, he could not improve the situation." The owner of MSL eventually stated "they did not have the technical expertise to deal with the project." The current Board is addressing the root cause of the problem by hiring an experienced drainage specialist to fix it. We're also working with the appropriate government authorities.