

To: Oak Bluffs Planning Board
From: Davio Danielson, Manager
Date: February 15, 2018
Topic: Lagoon Ridge Applicant's Responses to Alan Robillard

The thoroughness and focus on detail in Mr. Robillard's critique of Lagoon Ridge and of the work done by the Staff and Commissioners of the MVC and Town officials of Oak Bluffs in their multiple reviews of the project is truly extraordinary. He is an immediate abutter. The MVC and the Planning Board recognize that negative impacts may be felt by some immediate neighbors. His opposition is therefore understandable but also rebuttable. He presents many, many pages of criticism and questions with multiple attachments, often to the point of confusion and obfuscation. Much of the detail is on minor issues, but he has raised some questions that require a rational and reasoned response.

1. Nitrogen:

Protecting the Lagoon's waters from continued and excessive flows of nitrogen is a major concern that all Islanders share. It is the focus of comments from our highly respected Shellfish Constable, David Grunden, and several others on both the Oak Bluffs and Vineyard Haven side of the Pond. Mr. Robillard includes and references 14 separate reports, including one report on the nitrogen problems in the Lagoon that is 168-pages long with a 12-page single-spaced Executive Summary. Dave Grunden provided references to dozens of studies and informed the Planning Board that over \$600,000 has already been spent on studies of issues related to the waters of the Lagoon. Studies abound, but in my opinion, Lagoon Ridge is finally actually doing something about it.

What gets lost in framing the argument for the Planning Board to deny our family's right to develop land that we have held in a natural state for half a century is that Lagoon Ridge is truly part of the solution, even if some argue we are part of the problem.

Lagoon Ridge is a fill-in development, surrounded by scores of homes on developed acre-and-a-half lots in the R-3 zone on five subdivisions of roughly 200 lots all approved in the early 1980s. Many of the neighboring homes are large, with big lawns. None of these subdivisions have building envelopes shown on their plans restricting the use of the lots. Lagoon Ridge does.

Many of these existing homes built in the 1980s are still served by unimproved, aging Title V septic systems without leaching trenches as now required. These

older systems barely reduce the nitrogen the occupants produce. Indeed, one person who lives on Sage's Way testified that his home has the only AI system in the area. Wastewater from each residence using standard Title V systems annually releases about 13.5 pounds of nitrogen into the groundwater and the down-gradient ponds. In contrast, Lagoon Ridge's Amphidrome Plus system is expected to reduce that nitrogen by 75%.

In addition, Lagoon Ridge is creating smaller homes with fewer bedrooms, keeping c. 60% of the property in its natural state, restricting fertilizers, and reducing lawns to 10% of the development envelopes. These are ways of solving the problems caused by our inattention to the environment in the watershed in the past-- problems which are caused by existing and approved subdivisions, not by Lagoon Ridge.

Turning to Mr. Robillard's Attachment Number 8, page 7, we learn where the nitrogen in the Lagoon comes from: 1) 46% is from existing sediments in the deeper parts of the pond, 2) 34% is from septic systems, 3) 10% comes from atmospheric depositions (rain), 4) 5% is from run-off from roads and impervious surfaces, 5) 3% is from farming and agriculture, 6) 2% is from fertilizer, and 7) 1% can be traced back to the municipal landfill.

Note that only a third of the nitrogen that flows into the Lagoon is subject to manipulation and change. Drawing a hard line against 25 new homes in Lagoon Ridge when there are already c.1000 houses in Oak Bluffs and c. 350 in Vineyard Haven in the Lagoon drainage is short-sighted.

We think it is much better, as the MVC has provided, for this new nitrogen-reducing technology to be introduced to the Vineyard and studied to provide a pathway for significant future improvements. They will be needed around the Lagoon as old cesspools and Title V systems fail completely and need to be replaced, hopefully with more modern technology. Supporting the many alternative ways to reduce nitrogen that are being studied and attempted, such as growing oysters, restoring estuaries and wetlands, harvesting and removing phragmites, improving water exchange with the Sound, etc. These, to me, make more sense for advocates to pursue.

Mr. Robillard says he doubts whether the nitrogen calculations for Lagoon Ridge that the MVC accepted were accurate. In his argument, he makes some questionable assumptions, i.e. that changing from a 30' to 40' road right-of-way (ROW) means that all 40' will be clear cut and tarred, that the fire road above the

water main will require the entire 25' ROW to be denuded of trees, that the 20' ROW for a future possible Bikeway on Barnes Road will be developed and tarred, that the reserve SAS area will be clear cut, etc.

The nitrogen calculations as prescribed by the MVC are unaffected by what type of vegetation is maintained, except for lawns. None of the issues he has listed add to the amount of impervious surfaces, the variable that counts to a small extent in the nitrogen calculations.

The MVC is extremely careful and deeply committed to reducing nitrogen flows into all the sensitive coastal embayments. As the MVC states: "When reviewing proposed Developments of Regional Impact, the Commission ... carefully examines the proposal's wastewater disposal, especially with respect to the amount of nitrogen being put into nitrogen-sensitive watersheds." Two consulting engineers worked carefully with Lagoon Ridge and the MVC on the nitrogen calculations and testified to their completeness and accuracy. One engineer was hired by the Board of Health as a consultant. Mr. Robillard was present for many of these prior meetings and hearings, where he made many of the same attempts at criticism in 2016 that he is repeating again, at length.

2. The Amphidrome System:

When DEP led a major discussion of wastewater options at the Oak Bluffs Library a few years ago they were asked, "Is there a push to look at alternative new technologies?"

DEP's response was "Yes, the Massachusetts Septic System Test Center is located on Cape Cod and operated by the Barnstable County Department of Health and Environment. This Center tests and tracks advanced innovative and alternative septic system treatment technologies. DEP evaluates pilot studies for alternative technologies but will not approve a system unless it has been thoroughly studied and documented to be successful." It was on that basis that the Lagoon Ridge planning team researched and selected four DEP-approved alternative systems to consider. Amphidrome was one of them.

Then, the MVC hosted an Innovative/Alternative Conference on May 12, 2016 in West Tisbury that both Mr. Robillard and I attended. As the report stated: "The goal of this conference was to bring together industry professionals, scientists, policy makers and local stakeholders to discuss the issue of nutrient pollution in our local ponds and estuaries, and to explore various technologies and solutions to this problem. With the wide range of potential solutions discussed, we are

confident that our community can prevent further degradation of water quality and take measures to improve the health of our ponds. The MVC will continue to host informational sessions on alternative solutions and we look forward to collaborating to help clean up our waters.” Below are links to the presentations given at the conference and a link to MVTV to view the proceedings. (See footnote*.)

For many of us who attended, the opportunity to hear Mollie Calliri and Andrew McBrearty from F.R. Mahoney present extensive operational data on the Amphidrome systems and E-1 pumps, and answer questions, was most convincing. Additional data on the Amphidrome system has been posted on the O.B. Planning Board’s website that interested people may also wish to review.

Mr. Robillard has continued to submit complaints about the system’s complexity. The twenty-seven (27!) questions he posed that he expects the Planning Board to write regulations about in advance, seems to me to be vastly overdone. Even if relevant, they are properly matters for the Board of Health.

The system is working in hundreds of locations, is fully DEP approved, and the evidence of the system’s effectiveness is overwhelming. A skilled Grade 4 operator who lives year-round on the Vineyard, knows E-1 pumps from years of experience, and has begun special Amphidrome training testified credibly at the Public Hearing. He will be hired by Lagoon Ridge as the on-site operator, which seemed reassuring to many in the room. However, Mr. Robillard raises many of the same questions in yet another long commentary to the Planning Board dated February 12th.

Finally, the Amphidrome system for Lagoon Ridge has been upgraded. Based on prior conversation with a member of the Oak Bluffs Board of Health and his comments (speaking as an individual) at the Public Hearing on February 8th, 2018, the Applicant has agreed to add special components, at a cost of \$16,000, and to purchase and install the Amphidrome **Plus**, which is even more efficient at reducing nitrogen reliably. We feel that this issue has been fully and finally addressed.

3. Approval of the Amphidrome System:

Mr. Robillard’s allegations that somehow the approval of the Amphidrome system by the MVC and the Town of Oak Bluffs was based on circular reasoning and was a “clouded decision” are unsubstantiated and without merit. He cites dates and

quotes from multiple documents to create the appearance of some misdeed being done.

He is apparently unaware that the Oak Bluffs Board of Health delegated making the decision on the Lagoon Ridge shared system proposal to Mr. Ade Solarin, the Oak Bluffs Health Agent. Mr. Solarin, through the review period, was in frequent touch with Ms. Sheri Caseau, the Water Resources planner on the MVC Staff, and with a special consultant David Bennett of Bennett Environmental Associates in Brewster (<http://www.bennett-ea.com>), who he chose and hired (at our expense) to assist him and the Board of Health with the data review and the many legal requirements for such a system. Mr. Bennett is a professional geologist and hydrogeologist and a Licensed Site Professional since 1998. He is an expert in the fields of oil and hazardous waste cleanup and groundwater hydrology and water dynamics of the Cape and Islands.

Mr. Solarin's approval of the Amphidrome at the MVC staff level was a matter of record and common knowledge several weeks before he placed his decision on agenda for the Board of Health's agenda for routine Board approval on July 19, 2016. Our application to the Planning Board includes the shared system plan and permit issued. The Board of Health has confirmed this to your board by their letter of February 7, 2018.

It seems important to note that the Planning Board, under the Subdivision Control Law among other things, is required to defer to the Board of Health in such matters. The Planning Board is not in a position to second-guess the agency that is legally responsible under Massachusetts laws for wastewater management, as Mr. Robillard urges, having failed to make his case previously with the MVC and the Board of Health.

4. Plan Design:

"Plan Design" is the title of Mr. Robillard's 5-page summary of apparent inconsistencies submitted to the Planning Board on February 1, 2018. Each item will be briefly discussed in the order in which it was presented:

A. Number of Bedrooms: By reading or mis-reading multiple documents going back to 2015 and quoting phrases, often out of context, the commentator attempts to sow confusion or conflict over the size of the Amphidrome system and the number of bedrooms in Cluster B and C it will serve.

To be clear, there are 15 lots in Cluster C with two proposed duplexes for a total of 17 dwelling units. The dwellings in Cluster C will average 2.5 bedrooms each. By simple multiplication that is a total of 42.5 bedrooms in Cluster C. The bedroom limit in Cluster B, containing 4 lots within 1500' of the Lagoon shore, is 3 bedrooms per home, adding up to 12 more bedrooms. Both Cluster B and C are connected to the Amphidrome, now the Amphidrome**PLUS** system. The total is 55 bedrooms, which is the basis for the Amphidrome system as planned and permitted by the Board of Health and shown on the plan with our application. The “possibility” of a “Community House,” possibly on Lot 12, was treated by Mr. Robillard as if it is independent and supplemental to these calculations; it is not.

B. Mg/L Nitrogen (N):

The commentator has spotted a minor error in the MVC's Decision. Late in the MVC/LUPC review cycle, the Applicant was asked and agreed to add the 4 homes nearest to the Lagoon to the Amphidrome system, and an earlier clause—totally insignificantly—was not updated by the MVC staff in their printed decision. Such “scrivener's errors” can be corrected if needed, but this one caused no misunderstandings whatsoever.

C. Board of Health Decision Faulty:

See comments above, pages 4 through 6.

D. Other Plan Anomalies:

The commentator noted slight variations between different plans at different points in the project's long history and asks, for example, if the acreage is 32.07 acres how it affects the nitrogen calculations if it is actually 32.5 acres. (To be clear, the MVC's calculated limit is 110.4 Kg N/year and was based upon 32.47 acres.) Minor variations are not uncommon for large and irregular tracts of land like this one. That is why staff reviewers at the MVC and OBPB are always careful to stipulate which particular plan is under review, defined by date and author.

E. Compliance with Building Inspector:

Again, certainly with no intention to mislead, the commentator has misunderstood part of the long and complex project review process. A memo written by Mr. Mark Barbadero, a former OB Building Inspector, advised the Planning Board of his personal interpretation of Flexible Zoning, Section 7.3, and how it might be applied. It was not a set of instructions for Lagoon Ridge to follow, and with the exception of his proposed method for computing the Yield Plan, the Planning

Board has not asked Lagoon Ridge to implement any other of his many opinions and suggestions, nor should they.

F. No 50 foot buffer:

The commentator's statement is incomplete and incorrect. The Flexible By-law is also flexible about buffers, offering three specific conditions under which they are not required. The issue may be discussed further, but in the past, the Planning Board, the MVC, and the NHESP accepted what is shown on the Definitive Plan as it was filed with the Town Clerk on December 4, 2017.

G. 60% Open Space:

Mr. Robillard returns to the 60% open space issue yet again, although the computed numbers are shown in great detail on the Definitive Plan now under review. It is essential to us to be accurate, and we will review this issue in detail to be certain that the standard is being met and that 60% is protected within the terms required by the Town Zoning requirements. Now that the NHESP is no longer directly involved, the definitions and standards have been somewhat relaxed from "absolutely undisturbed" and now allow some agriculture and passive recreation.

As stated above, in "Plan Design" (Robillard's Comment dated 2/1/18) his arguments rest on several incorrect assumptions, i.e. that a 40' road right-of-way (ROW) means that all 40' will be tarred, that a 25' ROW fire trail above the water main means the entire area will be denuded of trees, rather than creating another walking trail through the woods, that the 20' ROW for a future possible bikeway on Barnes Road requested by the MVC will actually be developed and fully tarred, and that the designated "reserve SAS area" will be cut down and somehow become impermeable. All subdivision roads in Oak Buffs are required to have a 40 ft. way within which is a narrower improved travelled way. A mention in one 2015 document of a possible "5000 SF community house" becomes 5000 square feet stolen from the common lands although, if it were ever to be built, it would be a 2 or 3 story building possibly upon Lot 12, occupying perhaps 1800 square feet on a lot that is already counted as 100% developed.

More on this issue was again presented in a new memo, "Unresolved Issues" (Robillard's 6-page Comment, dated 2/12/2018.) The commentator as well as the Applicant and members of the Planning Board are trying to interpret the Town Counsel's legal memo dated 2/7/18 that raised many questions. Some of this commentary may be useful in that regard; some may not.

However, Mr. Robillard (in #9) states that landowners in Clusters A and B can “adjust the area” of the development envelope. That is not the case and misrepresents the facts. The area of the development envelope is fixed and shown on the Definitive Plan- a requirement of the open space calculation for NHESP. It is, rather, the location of the envelope within the lot that can be adjusted by the owner prior to construction. Regardless, the envelope must be bounded and marked with symbolic fencing to limit encroachments before construction of any kind can be commenced, consistent with the desires of NHESP. *See* the Protective Covenants at Section III.1.(1) - (5).

Further, (in #11) the commentator asserts that if trees are cut in an area, then that area must be subtracted from being “open space.” That was once somewhat true under “priority habitat” rules set by the NHESP, but it is no longer true now that the area that includes Lagoon Ridge has been “unmapped.” His two examples? One, the fire road, which may explicitly be counted as open space as it is a walking trail for recreation under 7.3.13.3. Two, the “shared septic plant and drain fields” (sic) that are underground utilities serving the development and are explicitly allowed on contiguous open space by the Town By-law at 7.3.13.4. These areas were both shown on the plans provided to NHESP and approved by them.

H. Trail On Clusters B and C Not on Definitive Plan:

There is no requirement that all existing trails on Lagoon Ridge acreage be maintained in their current locations. Several trail requirements suggested by the MVC by Bill Veno in the final days of the DRI Review appear on the Lagoon Ridge Plan around the Jib Stay Trail and Bar Trail Road. The MVC required trails are specified in its decision at Section 12. They are also included in the Covenants at Section IV.h. These are (i) the Bar Trail Road (a/k/a Old Back Road, or the Ancient Way), (ii) the Jib Stay Trail and a connecting easement along Lot 20, and (iii) a trail easement to be established within the layout of Double Ox Road from Barnes Road to the hammerhead turnaround at the end of Double Ox Road. Easements to use these trails will be granted to the Martha’s Vineyard Land Bank.

I. 1998 MVC Decision Re: Lagoon Ridge:

Mr. Robillard presents the MVC decision from 1998 when 2 lots were sold from Danielson property along Barnes Road and shown on a prior Form A Plan. The MVC Decision in 1998 stipulated that these two lots must be counted along with any future lots created on the remaining Danielson land as a DRI in establishing

the base for computing the future affordable homes requirement. The rules have been followed as explained in review of computing the BMN under Section 7.3.

Summary: Mr. Alan Robillard is an abutter who resides in the Oakwood Lane subdivision approved in 1986 (which has no building envelopes or protective covenants). He has closely followed the development of the Lagoon Ridge project for a decade as a neighbor and friend. His careful review of every aspect of years of Lagoon Ridge's history, development and regulatory review is exhaustive and has contained some useful observations and suggestions.

Would it have been helpful if confusing subsections of the Flexible Development rules had been interpreted by Town Counsel earlier? Certainly. Is that a valid reason to deny this Special Permit Application? Certainly not.

Would it be better if the MVC's written Decision were letter-perfect and flawless? Certainly. Is that any reason to condemn the validity of the Commission's unanimous vote of approval? Certainly not.

Would it be better if complete and complex regulations were already on the books in Oak Bluffs covering elder housing, shared septic systems for clusters of homes, and every aspect of Lagoon Ridge? Certainly. Is that any reason to further delay this project? Certainly not.

Lagoon Ridge proposes to add 3 homes for affordable housing and 6 homes for elders to the Town's housing stock, meeting priorities set by the Town Meeting when the Flexible Development bylaw was adopted. New homes and construction will add to the tax-base and create jobs. The extension of the municipal water system, which the Danielson family will pay for, will vastly improve water flows in the entire area for Lagoon Ridge and Pond View. The 21-home shared nitrogen-reduction system will demonstrate and evaluate a new technology on the Island that DEP sees as a major ultimate solution to reviving our failing ponds. On balance, this is a very positive and innovative project.

We are sorry that for immediate neighbors there will be a period of noise and dust as new roads and homes are built. But it is within our rights to proceed and do for our property as our neighbors have done for theirs. We are confident that we are proceeding in a way that lets us hold our heads high.

***Footnote**

Morning Session link to MVTV site <https://player.vimeo.com/video/166645486>

- Michael Giggey, [Cleaning up Our Waters](#)
- Dr. Brian Howes, MEP Process and findings
- George Heufelder, [Alternative Septic Test Center](#)

Afternoon Session link to MVTV site <https://player.vimeo.com/video/167652677>

- Rob Zimmerman, [Kohler CLASS](#)
- Gary Rubenstein, [Permeable Reactive Barriers](#)
- Dave Thompson, [Traditional Sewers](#)
- Mike Moreau, [FAST I/A Systems](#)
- Rick Karney, [Shellfish Aquaculture](#)
- Mollie Caliri and Andrew McBrearty, [Amphidrome](#)
- Dave Grunden, [Inlet Opening and Constructed Wetlands](#)
- Michael Loberg, [Tisbury Board of Health Regulations](#)