

COMMONWEALTH OF MASSACHUSETTS  
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT  
HOUSING APPEALS COMMITTEE

SURFSIDE CROSSING, LLC,

Appellant,

v.

NANTUCKET ZONING BOARD OF  
APPEALS,

Appellee.

Case #: 2019-07

**SUPPLEMENTAL PRE-FILED TESTIMONY OF BRUCE W. PERRY**

1. My name is Bruce Perry. I am competent to give this testimony and have personal knowledge of all facts contained herein except for those facts stated upon information and belief, which facts I am informed and believe are true and accurate.

2. I am co-owner of the property located at 16 South Shore Road, Nantucket, and am among the Nantucket residents who have intervened in this Housing Appeals Committee proceeding.

3. Along with other residents who have intervened, I expressed opposition to the project as proposed to the Nantucket Zoning Board of Appeals (“Board”) and urged denial of the project for lack of sufficient supporting information and because it would overburden the proposed project site in light of relevant local concerns.

4. On December 16, 2020, subsequent to denial of the residents’ original motion for intervention and anticipating the hearing of this matter, I agreed to cooperate with the Board in the

presentation of pre-filed testimony from me, which I provided expressly without waiving any of the issues raised in the motion to intervene.

5. This supplemental pre-filed testimony (“supplemental testimony”) addresses issues of local concern and of particular concern to the residents who have intervened, including fire and public safety, and sewerage systems and well contamination. In that regard, this supplemental testimony includes certain information contained in my December 2020 pre-filed testimony (“2020 Testimony”) which I believe is essential to an understanding of my overall testimony. However, this testimony is not limited to and expands upon that information, and reiterates and supplements certain opinions. Unlike my 2020 Testimony, this supplemental testimony does not comment upon economic viability of the project currently proposed or of the project as permitted by the Board.

6. I comment here on the basis of my intimate knowledge of the land and improvements surrounding the site of the Applicant’s project as currently proposed (“Project”) (“Project Site”), including my own land; my observations and understanding of the Board’s hearing process and information before this tribunal; my review of pre-filed testimony in this proceeding, including especially that of Nantucket’s Fire Chief Stephen A. Murphy, Nantucket’s Sewer Department Director David C. Gray, Sr., and Daniel E. Sheahan, P.E. of Weston & Sampson; my review of the affidavits of residents whose properties directly abut the Project Site to the south – Jack Weinhold, Chris Meredith, and Jacques Zimicki; and my professional experience and credentials described below.

7. I co-owned the properties at 14 and 16 South Shore Road since 2003. I have spent years living and walking my properties and the surrounding neighborhood, including the land and streets that immediately surround the Project Site, its abutters, and the South Shore

Road neighborhood generally. That includes frequent visits to my properties and the neighborhood since 2018.

8. For six years, I served as the technical consultant to the Nantucket Conservation Commission. In that capacity, I reviewed and commented on thousands of wetland permit applications and requests for delineation of resource areas. Through that work, I acquired and deployed extensive knowledge of wetland and other native plant species on Nantucket, wetland delineation techniques, soil typing techniques, wetland science, and related disciplines.

9. I participated in most of the ZBA hearings on the development application that is on appeal in this matter and supplied written comments as part of that hearing process, including hearings held on 11/27/18, 12/3/18, 12/13/18, 1/16/19, and 4/8/19. As a result, I became very familiar with the project as then proposed and considered, and the positions taken, objections raised, and issues related to it. I understand that this tribunal has concluded that the Project as currently proposed by the Applicant does not constitute a “substantial change” from the project as originally proposed to the Board, including with respect to overall density, usable open space, impervious surfaces, parking spaces, and roadway and traffic circulation. However, I have reviewed the layout and related plans for the Project as currently proposed.

10. My 2020 Testimony sets out my further credentials and experience, including those related to prescribed-burn and fire management and the management of horses. I do not repeat that background here.

11. The Pre-Filed Testimony of Weston and Sampson (“W&S”) engineer Daniel Sheahan identifies many concerns with the Applicant’s Project with respect to public sewerage. Those have included W&S’s recommendation that the Project not-construct connections to Nantucket’s existing force mains conveying flow to the Surfside WWTF, but instead deploy and

contribute to the cost of a gravity sewer along South Shore Road with a new pump station installed at the Surfside WWTF in accordance with planning that occurred prior to the Applicant's original proposal. I understand that the Applicant instead proposes to connect to the force mains and construct a new pump station on the Project Site though it has not specified where exactly such a station would be located.

12. As this tribunal is aware from the Pre-Filed Testimony of Mr. Sheahan (who notes his 35 years of relevant experience and team leadership of sewerage improvements and plans for the South Shore Road system) and the Pre-Filed Testimony of Nantucket Sewer Department Director David Gray, and I understand from that testimony and to some extent also my own professional work on Nantucket:

- A. There are three force mains (a 20-inch ductile iron pipe, a 16-inch cast iron pipe, and a 12-inch PVC pipe) that convey sewerage flow to the Surfside wastewater treatment facility ("WWTF").
- B. The 16-inch main, constructed in 1929 and HDPE-lined in 1986, failed catastrophically in January 2018 causing the escape of thousands of gallons of raw sewerage. The National Guard had to fly in an off-island contractor during extreme weather conditions to help address the fallout. This event occurred subsequent to an administrative consent order between the Town of Nantucket and EPA regarding sewer management issues and violations.
- C. That 16-inch main therefore is not currently in operation but for emergency use only.
- D. Flow from the Sea Street and Surfside Road pump stations is pumped through the 20-inch force main, which main runs directly through the Project Site and south into and through the directly abutting residential property of Jack Weinhold.

- E. According to Mr. Sheahan, “Due to the age and configuration of the 20-inch pipe, there is concern for the structural condition of this [20-inch] pipe as well.”
- F. Mr. Gray has stated that it is “near impossible” to isolate the 16-inch and 20-inch mains due to “no valving along the force mains.”
- G. The Applicant proposes to construct a new on-Site pump station and connect it to the existing 12-inch force main located in South Shore Road that services other areas as well. However, according to Mr. Sheahan, based on the Town’s prior evaluation of the force main hydraulics, there is concern that additional flow to this main could adversely impact operations of the existing pump stations, a problem which the Applicant has not evaluated, and, as Mr. Gray has stated, the main has “no backup options to stop any flows or to divert any flows should this line be compromised.”
- H. The density of the Project would create much higher wastewater flows than current zoning would allow.
- I. The Applicant has proposed to mitigate its flow contributions by means of certain modifications to the various pump stations. However, Mr. Sheahan states that such modifications are “not recommended in residential neighborhoods because they would create a potential for failure during peak flows and . . . surcharging the wet well or collection system, possibly resulting in a sewer overflow or backup into a home. Sewer Department staff may not have the ability to repair the problem on a timely basis and getting off-island contractors in time can be difficult or impossible.”
- J. The Applicant’s revised plans depict the 16- and 20-inch force mains on its Site. Yet, they do not show any method to protect the mains during construction from truck loading and multiple utility crossings to be installed above and below the mains. (During the Board

hearings, a representative of the Applicant said they would simply lay down plywood as protection, an obviously inadequate measure.)

13. During the Board hearings, Mr. Gray further testified that, because the force mains have no shut-off valves, a rupture in one of the mains would result in the release of 30,000 to 60,000 gallons of untreated sewerage before the flow could be stemmed.

14. From my professional experience including as the technical agent for the Nantucket Conservation Commission, the flow of groundwater within the South Shore Road neighborhood, including the Project Site and the abutting properties of Weinhold, Meredith and Zimicki and my own property, is from north to south.

15. From my professional experience reviewing data for thousands of septic systems in Nantucket, and from perc testing on my own South Shore Road property, I know that the Miacomet neighborhood, which includes the Project Site and the abutting properties of Weinhold, Meredith and Zimicki and my own property, is characterized by shallow groundwater and sandy soils. Those soils perc rapidly, generally at the maximum rate specified by Title V. Contaminants therefore migrate through them very quickly.

16. I understand that each of the three properties that directly abuts the Project Site to the south has its own private well, on which its residents exclusively rely for all household water needs, and that none of those residents has encountered contamination problems with their wells in the past.

17. I understand that the Weinhold well is located behind their house and only 8-10 feet from their property line with the Project Site. I also understand that the 20-inch sewer force main runs through the Project Site and south into and through the Weinhold property just east of the driveway adjacent to their home.

18. I understand that the Zimicki's well is located in the northeast corner of their property just 25 feet from their property line with the Project Site.

19. It is my professional opinion that the serious concerns and substantial risks of damage to and failure of the unprotected 16-inch and 20-inch force mains at the Project Site during excavation, construction and utility installation activities at the proposed 156-unit development - which are called out by Mr. Sheahan and Mr. Gray (and are underscored by the Town of Nantucket's consent to an ACO that confirmed the previous catastrophic pollutant discharge and the need to repair its vulnerable and problematic sewer infrastructure) - create an especially heightened and distinctive risk of contamination for the abutting Weinhold, Meredith, and Zimicki properties and their wells, which are reasonably likely or very likely to suffer considerable harm in the event of a sewer main rupture at the Project Site. It is my professional opinion that the risk is especially great for the Weinhold property and well. I base these opinions upon the foregoing information, including the proximity of the wells on the Site's southerly abutting properties, the continuity of the old 20-inch pipe through the Project Site and the Weinhold property, the large volume of any release of untreated sewerage in the event of a rupture, and the southerly groundwater flow and highly permeable soils on those lands.

20. From the foregoing information, it also is my professional opinion that the Applicant's proposal to build an unspecified sewer pumping station on the Project Site compounds those risks of harm to the abutting properties.

21. As noted above, with respect to the Applicant's proposed use of the existing 12-inch force main within South Shore Road by means of the unspecified new pumping station at the Site, Mr. Sheehan and Mr. Gray have expressed concerns that such connection

would overload the sewerage treatment system and pump stations that serve that residential corridor, with potential backup into homes or breakout of sewerage. It is my professional opinion that those risks pose an unnecessary and considerable risk of contamination to the homes and properties located in close proximity to the proposed new on-Site pump station and connection with the 12-inch main within South Shore Road, including my own property just across the street and one lot south from the southeast corner of the Project Site.

22. As this tribunal is aware from the Pre-Filed Testimony of Fire Chief Stephen Murphy:

- A. Partly due to staffing limitations, Nantucket's Fire Department heavily relies upon the use of aerial ladders for rescue operations in multistory buildings, which use requires adequate access and positioning of apparatus.
- B. Fire Chief Murphy has stated that the setbacks and parking configurations of the Project would "not allow the Department to safely and efficiently respond to emergencies at the Project Site," concerns which the Applicant has not addressed.
- C. Further, according to Fire Chief Murphy, the Fire Department would "not be able to get to the 'corners' of the building[s], which would be the ladder's prime space to work on two sides of the buildings."
- D. The current development plans actually removed references or provisions for emergency access via handicapped parking areas, compounding the inadequacies of the Applicant's plans for fire response.
- E. Fire Chief Murphy states that the Project's two means of egress are close to one another and on the same side of South Shore Road, such that blockage of the entrances or of that portion of South Shore Road would render the entire development inaccessible to the Fire



Department. That “could result in delays in controlling a fire, allowing it to spread within a large residential area.”

F. Nantucket’s unusually high prevailing winds, especially in winter (when wind direction is toward the south), mean that, according to Fire Chief Murphy, “reaching any fire that starts . . . as quickly as possible is a matter of the [sic] urgency for public safety. The essentially single means of egress for 156-units represents a real and present threat . . .” to occupants and residents.

G. Chief Murphy has concluded that, “It is the position of the Fire Department that the proposed design and size of the building[s] in relation to the size of the lot and the location of the site provide inadequate fire access, creating a serious public safety concern.”

23. From my decades-long residence on Nantucket including at the South Shore Road properties, my former work as the Nantucket Conservation Commission Administrator, my work as the Resource Planner and Ecologist for the Nantucket Land Bank, and my firefighting qualifications, training and experience, I am very familiar with the vegetation at and in the immediate area of the applicant's proposed project and with the implications of such vegetation for fighting fires. Specifically, both the Project Site and the Miacomet neighborhood which surrounds it and includes my South Shore Road properties are dominated by Pitch Pine Scrub Oak habitat and Maritime Shrub Coastal Heathland. (The attached copy of a plan depicting 2017-2018 habitat of the long-eared bat - submitted by the Nantucket Land Council to NHESP - confirms the predominance of such vegetation on and around the Project Site.) This vegetation is some of the most combustible and volatile vegetation in New England. The vast majority of the land at the project site and from that site down to the ocean contains an understory of that

vegetation. When a fire develops on land containing this type of vegetation, it is very hard to control, especially during warmer and drier months and when the wind is blowing.

24. Even if the Applicant were allowed to clear-cut native vegetation at the Site, the predominance of vegetation such as Pitch Pine Scrub Oak and Maritime Shrub Coastal Heathland in the immediately surrounding area, including on parts of the immediately abutting residential properties to its south, the density of the proposed development, the close proximity of the abutters' homes, and the strong prevailing winds present a very substantial risk of fire spread to those abutting properties, in part by means of sparking.

25. Based upon my personal experience as a property owner and resident in the Miacomet neighborhood, familiarity with the Site, education, training and experience in the fields of prescribed-burn and fire management, in soils and vegetation classification, and in the management of horses, the circumstances I have noted, and the testimony of Nantucket Fire Chief Murphy, it is my professional opinion that it is likely that a fire occurring at the Site would escape the Site to surrounding land and homes and that the immediately abutting residential properties to the south (Weinhold, Meredith, and Zimicki) are at an especially high risk.

26. Based upon my personal experience as a property owner and resident in the Miacomet neighborhood, familiarity with the Site, education, training and experience in the fields of prescribed-burn and fire management, in soils and vegetation classification, and in the management of horses, and the testimony of Nantucket Fire Chief Murphy, it is my professional opinion that the presence of the Project would foreseeably prevent Nantucket authorities from successfully fighting a significant fire at or near the Site, at my Nantucket property, and at the Weinhold, Meredith, and Zimicki properties.

27. The proposed development therefore would jeopardize those properties and the welfare and lives of residents of those properties.

28. Finally, although I do not support the number of units the Board approved for development (because I believe that number still would overburden the site), I support the Board's efforts to condition the project in light of local concerns. I am perplexed why the Committee would allow the Applicant to pursue an entirely new, 156-unit, all-condominium project on appeal, when that Project was never presented to the Board in the underlying public hearing, depriving both the Board and the public of any opportunity to review the Project in public proceedings, and the Applicant had sought approval for a 92-unit project, which it now does not even mention on appeal.

SWORN AND SIGNED UNDER THE PAINS AND PENALTIES OF PERJURY  
THIS 14<sup>th</sup> DAY OF JANUARY, 2022.

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Bruce W. Perry



# 2017 and 2018 Bat Acoustic Detector Locations - NLEB Detections

