Trial Court of Massachusetts The Superior Court	
Scott W. Nickerson, Clerk of Court Barnstable County	
COURT NAME & ADDRESS Barnstable County Superior Court 3195 Main Street Barnstable, MA 02630	
	Scott W. Nickerson, Clerk of Court Barnstable County COURT NAME & ADDRESS Barnstable County Superior Court 3195 Main Street

This action came before the Court, Hon. Cornellus J Moriarty, II, presiding, and upon consideration thereof,

It is ORDERED and ADJUDGED:

- 1. that the decision of the Falmouth Zoning Board of Appeals be affirmed to the extent that the operation of Wind 1 and Wind 2 constitute a nuisance; and
- 2. that the Town of Falmouth cease and desist the operation of the wind turbines forthwith.

DATE JUDGMENT ENTERED 06/21/2017

CLERK OF COURTS

COURTS AS SOLERK AFF W. Dur

BCV131: 05/2016

COMMONWEALTH OF MASSACHUSETTS

BARNSTABLE, ss.

SUPERIOR COURT
BARNSTABLE, SS

Filed JUN 2 0 2017

Clerk
TOWN OF FALMOUTH,
Plaintiff.

SUPERIOR COURT CIVIL ACTION NO. 2014-00003

V.

TOWN OF FALMOUTH ZONING
BOARD OF APPEALS and MATTHEW
MCNAMARA, PATRICIA JOHNSON,
KENNETH FOREMAN, EDWIN
ZYLINSKI, DAVID HADDAD and
MARK COOL as members of the
Falmouth Zoning Board of Appeals
and
BARRY FUNFAR and DIANE FUNFAR,
Defendants

MEMORANDUM OF DECISION

Procedural History

Barry and Diane Funfar ("the Funfars"), residents of 27 Ridgeview Drive, Falmouth, filed a complaint in March of 2013 with the Falmouth Building Commissioner, (the "Building Commissioner"), and sought to compel the Town of Falmouth ("Town") to stop operating two wind turbines on the Town's land off Blacksmith Shop Road. In their complaint, they alleged that the operation of the turbines violated § 240-110 of the Zoning Bylaw, which prohibits

¹Section 240-110 of the Falmouth zoning by-law provides: "No use shall be permitted which would be offensive because of injurious or obnoxious noise, vibration, smoke, gas, fumes, odors, dust or other objectionable features, or be hazardous to the community on account of fire or explosion or any other cause. No permit shall be granted for any use which would prove injurious to the safety or welfare of the neighborhood into which it proposes to go, and destructive of property values, because of any excessive nuisance qualities."

offensive uses with excessive nuisance qualities.

On June 7, 2013, the Building Commissioner denied the request (the "Denial"). The Funfars appealed the Denial to the Falmouth Zoning Board of Appeals ("ZBA") which, after a public hearing, voted to overturn the Denial. The ZBA found that the operation of the wind turbines constituted a nuisance at the Funfars' property. The ZBA filed its decision with the Town Clerk on December 17, 2013.

The Town, the owner and operator of the wind turbines, appealed the ZBA decision, pursuant to G. L. c. 40A, § 17, to this court. The Town asserts that the Building Commissioner correctly issued the Denial, and that the ZBA decision overturning the Denial was unreasonable, arbitrary and capricious and otherwise unlawful.

STANDARD OF REVIEW

When an appeal to a local zoning board is determined, an aggrieved party is entitled to seek judicial review of the decision pursuant to G. L. c. 40A, §17. Cumberland Farms, Inc. v. Planning Bd. of Bourne, 56 Mass. App. Ct. 605, 609-10 (2002). In such a case, "[t]he court shall hear all evidence pertinent to the authority of the board or special permit granting authority and determine the facts, and, upon the facts as so determined, annul such decision if found to exceed the authority of such board or special permit granting authority or make such other decree as justice and equity may require." G. L. c. 40A, §17. On appeal to the Superior Court, the matter is heard de novo. Bicknell Realty Co. v. Bd. of Appeal of Boston, 330 Mass. 676, 679 (1953). "The decision of the board is no more than the report of an administrative body and on appeal has no evidentiary weight." Devine v. Zoning Bd. of Appeals of Lynn, 332 Mass. 319, 321 (1955). The

judge is required to make his/her own findings of fact, independent of any findings of the board, and to determine the legal validity of a zoning board's decision. Roberts v. Southwestern Bell Mobile Systems, Inc., 429 Mass. 478, 485-486 (1999); Britton v. Zoning Bd. of Appeals of Gloucester, 59 Mass. App. Ct. 68, 72-75 (2003).

A review of a board's decision, "while based on de novo fact finding, is nonetheless 'circumscribed ... [and] cannot be disturbed unless it is based on a legally untenable ground, or is unreasonable, whimsical, capricious or arbitrary." Davis v. Zoning Bd. of Chatham, 52 Mass. App. Ct. 349, 355 (2001), quoting Roberts, 429 Mass. at 486. So long as "any reason on which the board can fairly be said to have relied has a basis in the trial judge's findings and is within the standards of the Zoning By-Law and The Zoning Enabling Act, the board's action must be sustained regardless of other reasons which the board may have advanced." S. Volpe & Co., Inc. v. Bd. of Appeals of Wareham, 4 Mass. App. Ct. 357, 360 (1976).

A jury waived trial was held before the undersigned. Based on the credible evidence and the reasonable inferences drawn therefrom, the following findings of fact and rulings of law are made.

FINDINGS OF FACT

- The Town is the owner of 314 acres of land ("The Property") located on Blacksmith
 Road. The Property lies within a Public Use District under the Town's Zoning By-law.
- 2. The Property is the site of the Town's wastewater treatment facility ("WWTF"), which the Town constructed in the early 1980's. It also houses the Town's dog pound, which located there in 2001-2002, as well as the two subject wind turbines, known as Wind 1 and Wind 2.

- 3. The Funfars have resided at 27 Ridgeview Drive, located in the Craggy Ridge neighborhood of West Falmouth, for over 34 years.
- 4. Route 28 abuts the Funfars' property to the east. It is a busy four-lane state highway with two lanes in each direction divided by a median strip in the middle.
- 5. Sometime in 2004, the Town informed residents that it was undertaking a feasibility study to evaluate the potential of installing a wind turbine with an overall height of 240 feet at the site of the WWTF.
- 6. The Town also organized a field visit to the Town of Hull on June 22, 2004 to view the Hull 1 wind turbine, a 660 kilowatt turbine. Mr. Funfar went on the trip.
- 7. The Town subsequently decided to install a significantly larger turbine, (a Vestas V-82 1.6 MW Turbine instead of a 660 kW Turbine), than what was installed in Hull. The overall height of the Vestas V-82 is approximately 400 feet.
- 8. The Town installed its first wind turbine, known as Wind 1, at the WWTF which became operational in March of 2010. It sits approximately 1660 feet from the Funfar Property
- 9. Prior to Wind 1's construction, the Town's engineers recommended the Town obtain a special permit. Five days later, the Building Commissioner determined that a special permit was not required and issued a building permit for Wind 1. ²

² On August 25, 2010, neighbors including the Funfars sought an enforcement action by the town's building commissioner asserting that the town was in violation of the by-law by operating Wind 1 without a special permit. The building commissioner denied their request in a letter dated September 24, 2010, and the plaintiffs appealed to the ZBA, which affirmed the building commissioner in a decision dated March 3, 2011. A judge of the Superior Court affirmed the decision of the ZBA. The Appeals court reversed, holding that a special permit was required. See *Drummey v. Town of Falmouth*, 87 Mass. App. Ct. 127 (2015). The ZBA subsequently denied the special permit. As a result, Wind 1 now stands idle.

- 10. Soon after Wind 1 commenced operation, Barry Funfar and other neighbors authored letters to town officials complaining about the noise from Wind 1.
- 11. On prior occasions, Mr. Funfar complained of noise emanating from the WWTF including such sounds as back up beepers and barking dogs. However these complaints were sporadic at best and made with nowhere near the frequency with which he complained about noise from the wind turbines.
- 12. Other residents of the neighboring area have lodged complaints about the turbines, including several of the Funfars' neighbors in the Craggy Ridge Neighborhood.
- 13. Prompted by complaints from the neighbors, some of whom described the noise emissions as thunderous and thumping, the Town commissioned a study to address issues involved with Wind 1. The Town retained Weston & Sampson Engineers, Inc., which in turn retained Harris Miller Miller & Hanson ("HMMH"), an acoustical consulting firm. The study purported to assess the noise impacts from Wind 1 and to model and predict sound levels expected from the operation of Wind 1 and the yet to be constructed Wind 2.
- 14. In June, 2010 the Town provided sound log sheets to approximately 300 property owners within a one-half mile radius of Wind 1. The purpose of the log sheets was for residents to record their perceptions of sounds they heard from the turbine. Approximately a dozen log sheets were completed and returned.
- 15. At the time of construction of the wind turbines, the Code of Massachusetts Regulations (Title 310, Section 7.10), empowered the Division of Air Quality Control (DAQC) of the Department of Environmental Protection (DEP) to enforce noise standards. According to the policy, first adopted in the early 1970's and revised in 1990 (DAQC90-001), a source of sound

would be considered to be violating the noise regulation if the source: "I. Increased the broadband sound level by more than 10 dB(A) above ambient; or 2, produce[d] a 'pure tone' condition"

- 16. Ambient is defined as the background noise that is exceeded 90% of the time (L90) and accordingly reflects a quiet background...
- 17. A pure tone condition is distinctive single pitch or a series of single pitches.
- 18. The increase of a 10dB(A) over ambient is roughly a doubling of perceived sound.
- 19. These criteria were measured both at the property line of the source of the sound and at the nearest inhabited residence.
- 20. The 10 dB(A) standard used by the DEP was never adopted into a By-law by the Town of Falmouth.
- 21. At the time, the Town also had a sound policy, Article XXXIV Chapter 240, which provided: "There shall be a rebuttable presumption that the noise from the windmill in excess of 40dB(A) as measured at the (facility's) property line shall not³ be excessive." Wind 1 and Wind 2 when operational create a noise greater than 40dBa at the WWTF property line.
- 22. The HMMH study took place over 10 days between June 18, 2010 and June 28, 2010.
- 23. HMMH conducted sound studies at the Funfar property on four different occasions for a period of thirty minutes each and a continuous long term monitoring over 10 days at other locations in the neighborhood.
- 24. The study compared the sound while the turbine was running with the sound when the

³ It appears undisputed that the word "not' is misplaced and the By-Law as corrected should read: "There shall be a rebuttable presumption that the noise from the windmill in excess of 40dBA as measured at the property line shall be excessive."

turbine was off. Because Wind 2 was not constructed at the time of the study, HMMH attempted to model potential sound from Wind 2 both separately and together with Wind 1.

- 25. When operational the turbines produce a constant sound.
- 26. The HMMH study concluded that at the Funfars' residence, Wind 1 operating alone produced an increase in the sound level of approximately 7.5 decibels.
- 27. The HMMH modeling study concluded that with both Wind 1 and Wind 2 operating together, the sound emissions from both turbines would produce a 9.6 decibel level increase over ambient.
- 28. The measuring devices utilized by HMMH have a margin of error of 1.5 dB(A).
- 29. Neither the measured or projected increases in sound level over ambient constituted a violation of the DEP noise policy, but both would have been in violation of the 6 dB(A) noise standard that was later adopted by the Town at its Annual Town Meeting in 2013.
- 30. In September 2011, the Town requested the DEP to conduct sound samplings of Wind I in response to numerous complaints from neighboring residents. The DEP conducted noise impact testing at the Funfar property March 15, 2012 and March 27, 2012. That study revealed that Wind 1 produced an 8.4 decibel increase over ambient on March 15, 2012 and a 7.0 decibel level increase on March 27, 2012.
- 31. In February, 2012, Wind 2 became operational. It sits approximately 1560 feet from the Funfars' residence.
- In order to achieve a decibel level of less than 40dB(A), a wind turbine that can produce a sound level of 108dB(A) should, as a general rule, be setback at least 800 meters (approximately 2,625 feet) from the property line.

- 32. Both Wind 1 and Wind 2 can produce a sound power level of up to 110 dB(A).
- 32. Wind 1 and Wind 2 provided a benefit to the Town. Collectively Wind 1 and Wind 2 produced more than sufficient electric power to operate the WWTF. Power produced in excess of the WWTF's requirements was sold to a local electric utility company and the revenues garnered from the sale of the excess energy used to offset other Town expenses.
- 33. A third, private, turbine, the Webb turbine, is located in the Falmouth Technology Park.
- 34. Although the same height as Wind 1 and Wind 2, it is located much farther away, approximately 4,878 feet, from the Funfars' property. The Funfars have not complained of noise from this turbine.
- 35. Wind 1 and Wind 2, when operating, also produce a continuous swoosh sound, described as amplitude modulation, at the approximate rate of once per second.
- 36. The turbines also produce infrasound, which is defined as a a sound below the normal range of hearing, typically 20 hertz. A characteristic of infrasound is that it is felt not so much as heard.
- Residents of the neighborhood have described feeling powerful pulses, which are characteristic of low frequency sound.
- 38 Neither the HMMH or DEP studies measured infrasound or amplitude modulation.
- 39. On March 11, 2013, the Funfars filed a complaint with the Building

 Commissioner, Eladio Gore ("Gore"), which alleged that the Town's wind turbines were a

 nuisance in violation of the By-Law and that the noise, low frequency sound, infrasound, and
 pressure waves have been a continual detriment to their health and quality of life.
- 40. On June 7, 2013 Gore denied the Funfars' request for zoning enforcement. He based his

decision on the fact that there was no evidence that the wind turbines were in violation of the By-Law and/or the MA/DEP policy.

- 41. Prior to the time that the ZBA issued its decision, but after Gore denied the Funfars' request for enforcement, the Town adopted Article XXXIV entitled "Wind Energy System." The By-Law includes §240-166H which requires a special permit from the Planning Board for any wind energy system and prescribes various criteria that must be met in order for the Planning Board to issue the Special Permit. One of the specified criteria provided that the sound set back shall be determined "in order not to exceed increases in broadband sound levels by more than six A weighted decibels..."
- 42. On December 17, 2013 the ZBA determined that Wind 1 and Wind 2 caused a nuisance to the property located at 27 Ridgeview Drive that directly and negatively effects the health and well being of the Funfars, and that the wind turbines have decidedly decreased the value of the Funfars' property.
- 43. The ZBA directed the Building Commissioner to take whatever steps necessary to eliminate the nuisance created by Wind 1 and Wind 2 on the property located at 27 Ridgeview Drive, West Falmouth, Massachusetts.
- 44. The appeal to this court, pursuant to G. L. c. 40A, § 17, followed.
- 45. The operation of Wind 1 and Wind 2 have had a deleterious and injurious effect on Barry Funfar's health and well being.
- 46. This court finds both Funfars to be credible and trustworthy witnesses. Mr. Funfar suffers from stress, anxiety, insomnia and nausea caused by the wind turbines. He is plagued by panic attacks and suicidal thoughts. He is no longer able to remain outside in his yard for any

extended period of time.

- 47. These afflictions have driven him from his home and, as a result, he and his wife have sought refuge in the Dominican Republic, during which time their symptoms abate. While it is true Mr. Funfar has suffered from chronic PTSD, recurrent major depression and alcohol dependence prior to the installation of the wind turbines, I find that his symptoms have been significantly exacerbated by their operation.
- 48. Diane Funfar has also suffered adverse health consequences attributable to the wind turbines albeit to a lesser extent than her husband. She too suffers from sleep disturbance, headaches and ear problems.
- 49. Before the turbines were installed, the Funfars had a living environment that was restful and enjoyable. This court has little doubt that, as a consequence of the wind turbines, the Funfars believe that their home's market value has lost much of its value to them personally. However that is not the test.
- 50. Joseph Clancy, an experienced real estate appraiser opined that the value of the Funfars' home was \$425,000 as of December 3, 2013 and that properties located in the Craggy Ridge neighborhood had declined approximately 20% in value because of the turbines.
- 51. Mr. Clancy used the sales comparison approach to establish a market value of the Funfar property as of December 2013. I am not at all persuaded that the sales utilized by Mr. Clancy were substantially comparable as one involved a short sale and the other was in a different neighborhood than the Funfar Property.
- 52. Moreover another appraisal made of the Funfar Property by Barnstable Appraisal
 Services for purpose of obtaining a home equity loan in December of 2013 from Rockland Trust

Company concluded that the fair value of the Funfar Property as of December 20, 2013 was \$585,000. By that time both Wind I and Wind 2 were operational.

- 53. There was reliable evidence from the Town Assessors' office which demonstrated a three percent decline in value in the Craggy Ridge neighborhood based on sales in 2012 and 2013.
- 54. Accordingly, based on the evidentiary record at this trial I am unable to conclude that the siting and operations of the wind turbines has decidedly decreased the fair market value of the Funfars' property.

DISCUSSION

The issue presented in this case is whether, based on the facts found, the ZBA acted unreasonably, whimsically, capriciously, arbitrarily or on legally untenable grounds in determining that Falmouth's wind turbines violated the nuisance provision of the Zoning By-Law. See MacGibbon v. Board of Appeals of Duxbury, 365 Mass. 635, 639 (1970). A ZBA decision cannot be disturbed unless it is based on a legally untenable ground, or is unreasonable, whimsical, capricious or arbitrary. The point of departure is the board's decisions and the reasons therein. S. Volpe & Co., Inc. v. Board of Appeals of Wareham, 4 Mass. App. Ct. 357, 359 (1976), citing Vazza Properties, Inc. v. City Council of Woburn, 1 Mass. App. Ct. 308, 312 (1973), ("the nature of the findings the judge is required to make must be governed by the nature of the reasons a board gives for its decision").

Here the ZBA found that the Town wind turbines were a nuisance to the Funfars' property because they directly and negatively effected the health and well being of the Funfars.

That finding was well supported by the Funfar's testimony. "A decision is arbitrary and capricious when it lacks any rational explanation that reasonable persons might support."

Cambridge v. Civil Serv. Commn., 43 Mass. App. Ct. 300, 303 (1997). The decision here was hardly arbitrary and capricious. In support of its decision, the ZBA found that the DEP study of May, 2012 would have exhibited an impact sound of 11.5 dba over ambient was proof that the wind turbines had the potential to exceed the DEP regulations and also the Town standard of 6dB(A) over ambient.

The Town argues that it was legally untenable and thus "erroneous" for the ZBA to apply the "6dB(A) above ambient" sound level standard to Wind 1 and Wind 2. It argues that the By-Law was inapplicable because the installation of both turbines took place before adoption of the by-law. I do not agree. Here, the 6dB(A) over ambient standard was in effect at the time of the ZBA hearing and at the time the ZBA rendered its decision. The choice of what standard to apply was the ZBA's to make. In the context of zoning law and the exercise of judicial review under G. L. C. 40A § 17, courts should give great deference to the view taken by the local authority when "in the discretionary exercise of its expertise, [it has] made a choice between two fairly conflicting views." Davis v. Zoning Board of Chatham, 52 Mass. App. Ct. 349, 365 (2001), and cases cited. Here, the ZBA, charged with the administration of § 240-110 and mindful of the purpose of the zoning laws, fairly considered the case and reached a judgment that the lower standard was consistent with the overall purpose of the local zoning law and served to advance other important interests as well. The ZBA's finding that there was a potential to exceed a 6dB(A) standard at the Funfar Property was also supported by the evidence and was not unreasonable, whimsical, capricious or arbitrary or based on legally untenable grounds.

The court heard evidence from a number of well qualified acoustical engineers who opined as to the sound levels produced and predicted to be produced by the wind turbines under varying conditions. There were varying opinions as to if, when, and where the noise levels would exceed the standard imposed by either the DEP or the Town Although there was much testimony about the applicability of the appropriate sound level to be applied, the issue is not whether the sound emissions from the wind turbines complied with one or the other guideline because nuisance is not defined in the zoning bylaw by any numerical standard. The issue is whether, on the facts found, the operation of the wind turbines was offensive because of injurious or obnoxious noise or vibration a nuisance in violation of the By-Law.

There is no definition of "injurious" in the By-Law. However that does not mean the term is so vague as to render it meaningless. "When a statute does not define its words a court will give them their usual and accepted meanings, as long as these meanings are consistent with the statutory purpose. A court derives the words' usual and accepted meanings are derived from sources presumably known to the statute's enactors, such as their use in other legal contexts and dictionary definitions." *Glennon v. School Comm. of Boston*, 375 Mass. 757, 763 (1978). Turning to the lexical definition, "injurious" is defined as "harmful and tending to injure". Black's Law Dictionary (10th ed. 2014). The physical effects of the turbine-generated sound upon Mr. Funfar have been certainly harmful and have tended to injure him.

The Town argues that the evidence establishes that the ZBA erred when it found that the turbines constituted a nuisance to the Funfars. The By-Law does not precisely define a nuisance, although it does provide guidance in Section 240-110, which states: "No use shall be permitted which would be offensive because of injurious or obnoxious noise, vibration, smoke, gas,

fumes, odors, dust or other objectionable features, or be hazardous to the community on account of fire or explosion or any other cause. No permit shall be granted for any use which would prove injurious to the safety or welfare of the neighborhood into which it proposes to go, and destructive of property values, because of any excessive nuisance qualities.."

It is true that what constitutes a nuisance is not easily determined. A private nuisance is generally defined as a condition when a property owner, here the Town, permits, or maintains a condition or activity on his property that is intentional and unreasonable or unintentional and negligent, reckless, or ultrahazardous which causes a substantial and unreasonable interference with the use and enjoyment of the property of another. See *Morrissey* v. *New England Deaconess Assn.*, 458 Mass. 580, 588 n. 15 (2010).

"There is no hard and fast rule as to what does and what does not amount to a nuisance. It is largely a matter of degree and of the relationship of various factors to each other. The character of the locality is a circumstance of great importance." Kasper v. H.P. Hood & Sons, Inc., 291 Mass. 24, 27 (1935). As noted above the wind turbines provide a financial benefit to the Town. However, "[a] nuisance may be a right thing in the wrong place, like a pig in the parlor instead of the barnyard." Euclid v. Amber Realty Co., 272 U.S. 365, 388 (1926).

The law of nuisance "does not concern itself with trifles, or seek to remedy all the petty annoyances of everyday life in a civilized community." Rattigan v. Wile, 445 Mass. 850, 855-856 (2006). The injury "must have substantially interfered 'with the ordinary comfort ... of human existence' or have been substantially detrimental to the 'reasonable use[] or value of the property." Id. at 856. Liability for a nuisance "is imposed [only] in those cases in which the harm or risk to one is greater than he ought to be required to bear under the circumstances, at

least without compensation." *Rattigan*, 445 Mass. at 855-856, quoting Restatement (Second) of Torts § 822 comment g, at 112 (1979).

While it is true that "[i]njury to a particular user of specially sensitive characteristics does not render [the objected-to behavior] an actionable nuisance", Lynn Open Air Theatre, Inc. v. Sea Crest Cadillac-Pontiac, Inc., 1 Mass. App. Ct. 186, 187 (1973), a noise may constitute an actionable nuisance, if it affects injuriously the health or comfort of ordinary people in the vicinity to an unreasonable extent. The standard is what ordinary people, acting reasonably, have a right to demand in the way of health and comfort under all the circumstances. "The number of people concerned by the noise and the magnitude of the industry complained of are both elements entitled to consideration in reaching a conclusion as to the fact." Stevens v. Rockport Granite Co., 216 Mass. 486, 489 (1914). Despite the Town's insistence that Barry Funfar is hypersensitive to sound, it is clear that he is no lone voice crying in the wilderness. Other residents of the neighboring area have registered similar complaints which was the very reason the Town commissioned the HMMH study in the first place.

For all of the forgoing reasons, I conclude that the operation of the Town's wind turbines and the consequent sound emissions constitute a substantial and unreasonable interference with the Funfars' enjoyment of their property and constitute a nuisance. There remains the question of the appropriate remedy. The ZBA ordered the Building Commissioner to take whatever steps necessary to eliminate the nuisance. The By-Law specifically states: "No use shall be permitted which would be offensive because of injurious or obnoxious noise...." Accordingly I conclude the appropriate remedy is the cessation of the operation of the turbines forthwith.

ORDER

For all the foregoing reasons, it is hereby ORDERED AND ADJUDGED, (1) the decision of the defendant Zoning Board of Appeals for the Town of Falmouth be affirmed to the extent that the operation of Wind 1 and Wind 2 constitute a nuisance; and, (2) it is further ORDERED that the Town of Falmouth cease and desist the operation of the wind turbines forthwith.

June 19, 2017

Cornelius J. Morighty II
Justice of the Superior Court