#### **MEMORANDUM**

TO: Cape Elizabeth Town Council

FROM: Ordinance Committee

DATE: August 29, 2008

SUBJECT: Windmill Amendments

## Introduction

At the August 21, 2008 meeting, the Ordinance Committee voted unanimously to recommend to the Town Council that the attached windmill amendments be adopted.

The windmill amendments were referred to back to the Ordinance Committee following a Town Council workshop where additional information was requested. In addition to the attached amendments, below and attached are responses to the request for more information.

### Questions

#### 1. What decibel standards do we now have?

The Site Plan regulation includes a noise standard. As much as possible, review standards reference specific requirements instead of a more subjective standard, such as that noise not create an undue adverse impact. The site plan standard for noise references specific numerical decibel levels and relates those levels to abutting uses.

The site plan noise standard was used most extensively in the review of outdoor events to be held at the Inn by the Sea. In that review, the Inn was granted approval to hold events for up to 176 guests where the decibel level will not exceed 55 decibels at the property line. Events are only approved outdoors until 9:00 p.m.

In order to comply with the standard, the Inn hired a noise consultant to measure noise levels. At the front of the Inn, the consultant determined that background noise from Route 77 exceeded 65 decibels. Ultimately, the Inn agreed to install sound blankets on the sides of outdoor tents and to keep a calibrated noise meter on the premises for use by the Police Department when responding to a noise complaint.

See also attached Wind Energy and Noise fact sheet. Below is the text of the Site Plan Review noise standard.

## O. Noise

1. The maximum permissible sound pressure level of any continuous, regular or frequent or intermittent source of sound produced by any activity on the site shall be limited by the time period and by

the abutting land use as listed below. Sound levels shall be measured at least four (4) feet above ground at the property boundary of the source.

Sound Pressure Level Limits Using the Sound Equivalent Level of One Minute (leq 1) (Measured in dB(a) Scale)

	7 a.m	10 p.m
Abutting Use	<u> 10p.m.</u>	<u>7a.m.</u>
Residential	55	45
Residential located in a commercial-industrial district	65	55
Public, semipublic and institutional	60	55
Vacant or rural	60	55
Commercial	65	55
Industrial	70	60

- 2. Noise shall be measured by a meter set on the A-weighted response scale, fast response. The meter shall meet the American National Standards Institute (ANSI S1 4-1961) "American Standards Specification for General Purpose Sound Level Meters."
- 3. No person shall engage in construction activities, on a site abutting any residential use between the hours of 10 p.m. and 7 a.m.

# 2. How many lots in Cape Elizabeth are over 20,000 sq. ft. in size? How many lots are between 20,000 and 43,560 sq. ft. in size?

Using the Assessor's database in the GIS system, the following lot numbers and map were generated.

<u>Lot Size</u>	Number of Lots (total 4,474 lots)
>43,560 sq. ft.	<u>+</u> 952 lots
>20,000 sq. ft. and < 43,560 sq. ft	<u>+</u> 806 lots

You may wish to note that the 1 acre size is typically rounded from 43,560 to 40,000 when establishing lot sizes in zoning regulations.

## 3. What connection is there between wind turbines and cell phone communication?

Attached is a fact sheet that includes a description of interference with television and other communication signals (page 2). The fact sheet discusses the impact of a wind farm, which is much larger than the individual residential windmills under consideration by the Town Council. For a wind farm, interruption is rare (when there is a direct line of sight) and is addressed by installing relays around the wind farm.

When researching information specifically for interference between windmills and cell phones, I discovered several proposals for installing windmills *on* cell phone towers. This proximity suggests that cell phone coverage is at a frequency that is beyond the range that would be impacted by cell phones.

#### 4. What is a neutral color?

See below.

What is a neutral color?

By Coral Nafie, About.com

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Filed In: Elements of Decor > Color in Decor > FAQs on Color

**Question:** What is a neutral color?

## **Answer:**

**Neutral** usually means without color. **Neutral colors** such as *beige, ivory, taupe, black, gray, and white* appear to be without color, and yet in many applications these hues often have undertones of color.

Be aware of these underlying tones as you match colors or choose paint. For example, beige might have an undertone of pink or tan or gold. White might be slightly ivory, yellow, bluish, or peachy