

**Harvard Planning Board  
Meeting Minutes  
March 16, 2009  
Approved: April 6, 2009**

At the end of the public hearing for the proposed changes to the Reuse Plan and Zoning Bylaws for Devens Regional Enterprise Zone Chairman Joseph Sudol called the regular meeting of the Planning Board to order at 8:00pm in the Town Hall Meeting Room

**Members Present:** Joseph Sudol, Barbara Brady, Kara McGuire Minar, Craig Bardenheuer and Lisa Fox (Associate Member)

**Others Present:** Liz Allard (LUB Admin), Mary Arata (Harvard Hillside), Valerie Hurley (Harvard Press)

**Minutes**

Brady made a motion to accept the minutes of January 5, 2009, February 2, 2009 and February 23, 2009 as amended. Bardenheuer seconded the motion. The vote was unanimously in favor of the motion.

**Request for Site Review of the Unitarian Church Fellowship Building**

Sudol stated the Building Inspector (BI), Gabe Vellante, requested the Planning Board review the plans submitted to him for a building permit by the Unitarian Church for the reconstruction of the existing Fellowship Building. Sudol stated he has looked at the plans and the only comments he has are that lighting should be in compliance with the Bylaw and input from Fire Chief should be received. A letter including those comments will be sent to the BI.

**Potential New Bylaw Amendment – §125-2 Definitions Building & Floor Area, Gross**

Brady stated the recommended definition of building comes from the uniform building code with the exception that it will not allow the location of fire walls to be used as a basis for determining separate buildings. Changes to the existing definition of Floor Area have also been drafted. Bardenheuer wanted to know how this definition will actually change the bylaw. Brady stated in §125-52G(2)(b), where building size is mentioned and §125-37(A)(1), where floor area is mentioned. Sudol stated major buildings were not meant to be residential buildings. McGuire Minar has concerns with the floor areas that are different within the bylaw. Sudol and Brady expressed that this suggested amendment would close the loophole recently found under the Ayer Road Village Special Permit applications. A public hearing on these amendments has been scheduled for April 6, 2009.

**Russell Decision**

Sudol stated the issues with this application have been the driveway egress and its sight distance. Sudol has spoken with the Town Administrator, Tim Bragan, who has stated Rich Nota, the Highway Director, would be the one who would decide where signs or mirrors would be placed on the roadway. The Planning Board could condition the decision requiring these safety devices are obtained through the Board of Selectmen. The conditions have to be strong enough of a safety issue so that the applicant cannot proceed until they meet the conditions. Sudol would like to know the position of the members. It is Bardenheuer belief that the driveway is absolutely unsafe without any mitigation. Bardenheuer also stated that he did visit the site again. A convex mirror would be adequate vision for someone coming out of the driveway, but not coming down the road. Bardenheuer believes the safety issue can be addressed if the driver coming out of the driveway uses these mirrors. Brady feels the same and believes a blind driveway sign would aid drivers coming down the road. Brady would think a sign is already in order with the existing driveway. McGuire Minar stated the thing that gives her trouble is the assumption that the people who should be using the mirror don't know the mirror is there for their use as a safety feature. This would not be the fact with people visiting, a delivery person or teenager. Fox stated it

sounds as if the Board is trying to make it work to be fair and allow the use of this property, but it is hard in this situation. Sudol stated the Board can try and make the conditions that the safety devices be installed be mandatory. Bardenheuer asked why it cannot just be a condition that needs to be met or the Special Permit is not valid. Fox suggested an additional signage for use of the mirror. Sudol will draft a decision and confirm with Mark Lanza about the conditions.

**Proposed Protective Bylaw Amendments Hearing.** Opened at 8:40pm

**Montachusett Regional Planning Commission Traffic Study Request**

Sudol stated he had discussed with the Town Administrator, Tim Bragan, of the possibility of a traffic count being conducted on Ayer Road by Montachusett Regional Planning Commission. Brady asked that Sudol follow up on the request to be certain it will be submitted by the March 31<sup>st</sup> deadline.

**Adjournment**

Brady made a motion to adjourn the meeting at 9:48pm. McGuire Minar seconded the motion. The vote was unanimously in favor of the motion.

Signed: \_\_\_\_\_  
Kara McGuire Minar, Clerk

Harvard Planning Board

Proposed Protective Bylaw Amendments Hearing Meeting Minutes

March 16, 2009

Chairman Joseph Sudol opened the meeting at 8:40pm in the Town Hall Meeting Room under M.G.L. Chapter 40A and the Code of the Town of Harvard, Chapter 125-50, the Protective Bylaw

**Members Present:** Joseph Sudol, Barbara Brady, Kara McGuire Minar, Craig Bardenheuer and Lisa Fox (Associate Member)

**Others Present:** Liz Allard (LUB Admin), Valerie Hurley (Harvard Press) and Mary Arata (Harvard Hillside)

**§125-2 Definitions - Structure**

Sudol stated Town Counsel, Mark Lanza, has approved the changes made to the definition of structure. (See Attachment A)

**§125-39B(5)(c) Site Standards – Layout**

Sudol stated Town Counsel, Mark Lanza, has approved the changes made to §125-39B(5)(c) Brady thinks the way it is stated would allow less restrictive guidelines if the criteria are met or that more restrictive criteria may be required. Brady suggested changing the word granted to consider. Brady also suggested removing the last sentence completely. McGuire Minar would leave it as it drafted currently. Bardenheuer asked Sudol if he found anything within the guidelines that would make them more restrictive. Sudol stated no. Sudol stated the question is will the Board allow the exception to go both ways? After discussion the members agreed to change the word granted to consider and add it could be more restrictive. (See Attachment B)

**§125-20E Drive-Throughs**

Sudol stated Town Counsel, Mark Lanza, has approved the addition of language to §125-20 in regards to drive-throughs. Bardenheuer stated this provision is incredible inconvenient to individuals who have children. Members agreed to the language as written. (See Attachment C)

**§125-21 Signs and General Corrections**

Sudol stated the amendment to §125-21 and general corrections of the Bylaw should be tabled until the appropriate time can be put into the amendments. Members agreed.

**§125-53 Residential Wind Energy Conversion System Overlay District**

Sudol stated he had received comments from Brady and Lanza. Sudol thinks the systems should be limited to not being shared as it would need extensive review to address issues of liability. Kilowatt capacity has been increased to twenty (20) kilowatts. McGuire Minar asked about lot size. Members agreed to change the wording to shall be prohibited on lots less than 1.5 acres. Members agreed with the draft as amended this evening. (See Attachment D)

Brady made a motion to accept proposed amendments and additions to the Protective Bylaw, Chapter 125 of the Code of the Town of Harvard and to forward them to the Board of Selectmen to be included as Warrant Articles for the 2009 Annual Town Meeting to be held on May 2, 2009. McGuire Minar seconded the motion. The vote was unanimously in favor of the motion.

Signed: \_\_\_\_\_  
Kara McGuire Minar, Clerk

## ATTACHMENT A

### ARTICLE XX: AMEND PROTECTIVE BYLAW – DEFINITIONS

To see if the Town will vote to amend the Protective Bylaw, Chapter 125 of the Code of the Town of Harvard, by making the following revisions to § 125-2:

[Key to revisions: underlining denotes additions; ~~striketrough~~ denotes deletions]

#### § 125-2 Definitions

##### 1) By revising the following definitions:

STRUCTURE – Any ~~construction or assemblage of materials with a fixed location, including a building,~~ platform, tower, pole, sign, ~~fence, wall,~~ dam, swimming pool, fence or wall that is greater than six (6) feet in height and in a fixed location, or any construction or assemblage of materials or any building greater than 120 square feet in floor area with or without pilings, footings or foundations. Underground utilities, ~~and~~ driveways and storage buildings having not more than 120 square feet of floor area shall not be considered structures. [Amended 4-21-1992 STM by Art. 4]

or pass any vote or votes in relation thereto.

(Inserted by Planning Board)

(2/3 vote required)

## ATTACHMENT B

### ARTICLE XX: AMEND PROTECTIVE BYLAW – INTENSITY OF USE

To see if the Town will vote to amend the Protective Bylaw, Chapter 125 of the Code of the Town of Harvard, by making the following revisions to § 125-39:

[Key to revisions: underlining denotes additions; ~~striketrough~~ denotes deletions]

#### **HARVARD PROTECTIVE BYLAW CHAPTER 125-39 SITE STANDARDS**

##### **§ 125-39. Site Standards. [Amended 4-13-1968 ATM.....]**

B. Standards for driveways.

(5) Layout.

(c) Driveway locations shall meet the line of sight criteria based on the American Association of State Highway and Transportation Officials (AASHTO) Policy on Geometric Design of Highways and Streets or, where driveways are located on very low-volume local roads (average daily traffic volume of 400 vehicles per day or less), locations shall meet the guidelines of AASHTO Guidelines for Design of Very Low-Volume Local Roads (Average Daily Traffic less than or equal to 400). Exceptions to these guidelines may be considered by the Planning Board where it can be shown that less restrictive criteria would not impact safety or that more restrictive criteria would be required for safety. Substantially clear visibility of driveways is provided for approaching street traffic;

or pass any vote or votes in relation thereto.

(Inserted by Planning Board)

(2/3 vote required)

## ATTACHMENT C

### ARTICLE XX: AMEND PROTECTIVE BYLAW – GENERAL

To see if the Town will vote to amend the Protective Bylaw, Chapter 125 of the Code of the Town of Harvard, by:

#### **Adding to § 125-20. General [Amended 3-5-1956 ATM.....**

E. Drive-in or drive-through services are specifically prohibited. Also specifically prohibited are drive-in or drive-through services offered as accessory use or part of a use that would be otherwise eligible for a special permit under The Town of Harvard Protective Bylaw, Chapter 125.

or pass any vote or votes in relation thereto.  
(Inserted by Planning Board)

(2/3 vote required)

## **ATTACHMENT D**

### **ARTICLE XX: AMEND PROTECTIVE BYLAW – RESIDENTIAL WIND ENERGY CONVERSION SYSTEM OVERLAY DISTRICT**

To see if the Town will vote to amend the Protective Bylaw, Chapter 125 of the Code of the Town of Harvard, by adding the following §125-53:

#### **HARVARD PROTECTIVE BYLAW CHAPTER 125-53 RESIDENTIAL WIND ENERGY CONVERSION SYSTEM OVERLAY DISTRICT**

##### **§ 125-53. Residential Wind Energy Conversion System Overlay District**

###### **A. Purpose and Intent**

The purpose of the Residential Wind Energy Conversion System Overlay District is to establish a district in which wind energy conversion systems may be permitted to provide the safe, effective use of small scale residential wind energy conversion systems to reduce on-site consumption of utility supplied electricity with minimal impact upon the public safety and health, upon the environment, and upon scenic, natural and historic resources. A wind energy conversion system is considered a residential wind energy conversion system only if it supplies electrical power solely for on-site residential use, except that when a lot on which the system is installed also receives electrical power supplied by a utility company, excess electrical power generated and not presently needed for on-site may be connected to the local utility electrical grid.

###### **B. Definitions**

- (1) Ambient noise level – the background A-weighted sound level (dBA) that is exceeded 90% of the time
- (2) Electromagnetic Interference – a disturbance that effects an electrical circuit due to conditions caused by a large rotating device or electromagnetic radiation emitted from an external source
- (3) Fall zone – a circle drawn on the ground with a radius equal to the WECS tower height plus twenty feet with its center at the center of the base of the WECS tower
- (4) Meteorological tower – a temporary tower equipped with devices to measure wind speeds and direction used to determine how much wind power a site can be expected to generate
- (5) Shadowing and flickering – the effects of shadows cast on neighboring areas and the flickering (blinking or moving shadows effect) caused by a WECS rotor chopping and reflecting the sunlight
- (6) View shed – the visual impact of the site from the area surrounding the site
- (7) Wind Energy Conversion System (WECS) – a device, including its supporting structures and equipment, which converts wind energy to electrical energy
- (8) WECS tower – the structure that supports the WECS equipment (turbine, gear

- box, rotor blades, etc) and is fixed to the ground
- (9) WECS tower height – Height measured from natural grade at the base of the WECS tower to the top of the rotor blade when the blade is fully extended vertically, or to the highest point that the WECS will reach at any point, whichever is greater

### **C. Applicability**

The Planning Board may grant a special permit for the installation of a Residential WECS on any Agricultural-Residential (AR) zoned tract of land with the following exceptions:

- (1) Town Center as defined in Figure 2: Harvard Center Land Use Plan of the Harvard Town Center Action Plan prepared by the Harvard Town Center Planning Committee and the Bluestone Planning Group dated March 2005 and on file in the Town Clerk's Office.
- (2) All land within the Harvard Common and Shaker Village Historic Districts as shown on Plan of Harvard Common Historic District, Revision C dated June 1976 and Plan of Shaker Village Historic District, Revision B dated March 1974, prepared by the Harvard Historical Commission, approved by Massachusetts Department of the Attorney General and on file in the Town Clerk's Office.
- (3) All view sheds within Harvard as identified in the Harvard Reconnaissance Report, Massachusetts Heritage Landscape Inventory, prepared by the Massachusetts Department of Conservation and Recreation, Freedom's Way Heritage Association and local participants, dated June 2006.

### **D. Underlying Zoning Requirements**

The Residential WECS Overlay District shall be construed as an overlay district with regard to said locations. All requirements of the underlying zoning district shall remain in full force and effect, except as may be specifically provided herein.

### **E. Submittal Requirements**

An application for a Residential WECS special permit, together with an application for site plan approval, shall be filed with the Town Clerk to be submitted to the Planning Board in accordance with §125-38 and the requirements of this section of the Bylaw.

### **F. General Requirements**

A Residential WECS may be erected on land located in the Residential WECS Overlay District upon the issuance of a special permit by the Planning Board pursuant to §125-46 of this Bylaw, subject to site plan approval by the Planning Board as set forth in §125-38, and the guidelines, requirements and limitations set forth below as



they may be amended.

- (1) Only one (1) WECS will be allowed per lot. Sharing of a WECS is prohibited.
- (2) A WECS shall be erected only on a lot with a land area of at least 1.50 acres.
- (3) WECS turbine rated capacity (nameplate capacity) shall not exceed 20 kilowatts (kW).
- (4) A WECS shall be as unobtrusive as possible and shall not create an adverse visual impact to abutters and the general public.
- (5) Applicant shall be required to provide evidence of liability insurance in an amount and for duration sufficient to cover loss or damage to persons and structures occasioned by the failure or collapse of the WECS.
- (6) Applicant may erect a temporary meteorological tower to determine the viability of the site to generate wind power upon application and issuance of a special permit by the Planning Board. The temporary meteorological tower shall comply with all provisions of this section of the Bylaw. The special permit shall have a duration of twelve (12) months.

#### **G. General Siting Requirements**

- (1) WECS tower height shall not exceed 100 feet.
- (2) A WECS shall have a minimum setback from abutting property lines equal to the WECS tower height plus twenty (20) feet. The erection of a WECS in front or side yards is prohibited.
- (3) The WECS fall zone shall be kept free of all habitable structures.
- (4) The WECS shall be sited in a manner that minimizes shadowing or flicker impacts. The applicant has the burden of providing proof that this effect does not have a significant adverse impact on neighboring or adjacent uses through either siting or mitigation.
- (5) The WECS shall be sited in a manner that minimizes the impact of potential ice throw from the rotor blades. The applicant has the burden of providing proof that ice throw will not impact abutting properties through either siting or mitigation.

#### **H. Design and Construction Standards**

- (1) Design of the WECS tower and foundation shall be such as to preclude the necessity for guy wires. Monopole towers are preferred. The WECS tower and foundation design shall be appropriate for the soil and climate conditions and certified by a Professional Engineer.
- (2) Noise from the proposed WECS shall not exceed three (3) dBA above ambient levels measured at property lines. The applicant has the burden of providing proof that this noise level will not be exceeded.
- (3) Lighting of, or attachment of lighting to, the WECS tower, except as required by the Federal Aviation Administration (FAA) is prohibited. The attachment of any systems or equipment to the WECS tower not required for its operation is prohibited.
- (4) Access to the WECS shall be limited through the installation of a lockable six (6)

foot high fence with vegetative screening or by limiting step bolts or ladder access attachments to the WECS tower to not less than twelve (12) feet from final finished grade at the tower base.

- (5) The WECS shall cause no disrupting electromagnetic interference with the use of other operating telecommunication devices including but not limited to radios, television, telephones, personal communication devices and other electronic equipment and devices. If it is determined that a WECS is causing interference, the owner shall take the necessary corrective action to eliminate this interference, subject to the approval of the Building Inspector. Failure to initiate corrective action within twenty-four (24) hours of notice will result in enforcement action.
- (6) The tip of the WECS blade or of any another rotating device must be a minimum of thirty (30) feet above final finished grade level at the base of the tower.
- (7) The WECS must be designed and installed to withstand natural lightning strikes.
- (8) The WECS shall be equipped with manual (electronic or mechanical) and automatic overspeed controls to limit the blade rotation speed to within the design limits of the WECS and a braking system device capable of halting operation.
- (9) All utility lines serving the WECS shall be installed underground.
- (10) The WECS shall be painted a non-reflective white or gray or other neutral non-reflective unobtrusive color.

## **I. Maintenance Requirements**

- (1) The applicant shall maintain the WECS and related equipment in good working condition and perform regular maintenance in accordance with an approved maintenance schedule. Maintenance shall include, but not be limited to, painting, structural repairs, and integrity of security measures. A record shall be kept of all maintenance performed and such records shall be provided to the Town Building Inspector in December of each year.
- (2) Should the WECS fall into disrepair and/or experience a situation in which it is producing unusual noise or other emissions, the applicant shall have no more than twenty-four (24) hours to implement actions to correct the situation.
- (3) Failure to maintain the WECS or correct duly noticed deficiencies within the time frame identified in this section of the Bylaw may result in enforcement action.
- (4) The applicant shall submit a letter to the Planning Board and the Town Building Inspector in December of each year confirming that the WECS is still in use.

## **J. Abandonment**

- (1) The WECS shall be dismantled and removed from the property by the applicant if:
  - (a) Use of the WECS is discontinued for a period of one (1) year without written consent of the Planning Board; or
  - (b) The WECS Special Permit has expired; or
  - (c) The Town Building Inspector determines that the WECS is structurally unsound and is considered a danger to life/limb after consulting with a licensed structural engineer; or
  - (d) Applicant is unable to correct any electromagnetic interference or

excessive noise within ninety (90) days from initial notice of deficiency.

#### **K. Financial Surety**

Applicant shall provide a form of surety, either through an escrow account, bond or otherwise to cover the cost of removal in an amount and form approved by the Planning Board, but in no event exceed more than 125 percent of the cost of removal.

#### **L. Application Review**

An application for a WECS special permit shall be filed in accordance with the requirements of this Bylaw. An application for a special permit shall include the following:

- (1) A site plan prepared by a professional engineer at a scale of 1:40, or other scale as deemed appropriate by the Planning Board, which complies with all requirements of §125-38D of this Bylaw, as it may be amended, and the additional requirements of this section.
- (2) The site plan shall also include the following:
  - (a) Property lines, dimensions, landowners, acreage, and contours at two (2) foot intervals of the subject property and property within 300 feet of the subject property.
  - (b) Location and elevation of the proposed WECS and any appurtenances and equipment. Indicate property boundaries and distances to the base of the WECS tower and to the nearest corners of any appurtenant structures and equipment.
  - (c) Proposed utilities and location of any proposed utility lines.
  - (d) Plans indicating locations and specifics of proposed screening and fencing.
- (3) The applicant shall provide delineation of view shed, or any area from within which the WECS can be viewed.
- (4) The applicant shall provide photographs of the site from key viewpoints where the WECS will be visible from public ways and/or abutting properties. Through means of computer simulation or other renderings, the applicant shall document the visual impact of the proposed WECS from all key viewpoints.
- (5) WECS Manufacturers drawings, plans, design details, maintenance requirements, and all information pertinent to the review of the application under this section of the Bylaw.
- (6) Applicant shall indicate whether the system will be an off-grid or interconnected system, (i.e., connected to the local utility grid).

#### **M. Compliance Documents**

The following shall be provided as part of the application:

- (1) Proof of liability insurance that satisfies §125-53E(4) of this section of the Bylaw
- (2) Documentation on how the effects of shadowing and flicker will be minimized that satisfies §125-53F(5) of this section of the Bylaw
- (3) Proof that ice throw will not impact abutting properties that satisfies §125-53F(6) of this section of the Bylaw
- (4) Design calculations certified by a Professional Engineer for the structural design of the WECS tower and foundation that satisfies §125-53G(1) of this section of the Bylaw
- (5) Documentation, listing existing ambient noise levels and maximum projected noise levels from the WECS that satisfies §125-53G(2) of this section of the Bylaw
- (6) A description of financial surety that satisfies §125-53J of this section of the Bylaw
- (7) Approval from the appropriate utility for the installation of a system intended to be interconnected to the local utility electrical grid.

#### **N. Term of Special Permit**

Any special permit granted under this section shall expire twenty (20) years after the date of the decision of the Planning Board granting the Special Permit.

or pass any vote or votes in relation thereto

(Inserted by Planning Board)

(2/3 vote required)