



Wind Turbine Special Permit Application

12 February 2010



Massachusetts Institute of Technology
Department of Facilities
Campus Planning + Design

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1. Special Permit Application Cover Sheet and Summary

A. Special Permit Application - Cover Sheet

To the Planning Board of the City of Cambridge:

The undersigned hereby petitions the Planning Board for one or more Special Permits in accordance with the requirements of the following Sections of the Zoning Ordinance:

1. 10.40 (Special Permits)
2. 11.43 (Wind Turbine – Special Permit)
3. _____
4. _____

Applicant: Massachusetts Institute of Technology

Address: 77 Massachusetts Avenue, Building NE49-2100
Cambridge, MA 02139-4307

Attn: Kelley Brown

Telephone: (617) 452-2410 **FAX:** (617) 253-4694 **Email:** kbrown@mit.edu

Location of Premises: 296 Vassar Street (Briggs Field Site) and 106 Vassar Street (Steinbrenner Stadium Site)

Zoning District: Residence C-3

Submitted Materials: Application form, project description, Existing Conditions Map, Existing Conditions Photos, Wind Turbine Location Site Plan, Elevation, Wind Turbine Photos, Photo Simulations, Dimensional Table, Ownership Certificate, Supporting Statement for Special Permit

Signature of Applicant: _____ **Date**

For the Planning Board, this application has been reviewed and is hereby certified complete by the Community Development Department:

Signature of CDD Staff: _____ **Date**

B. Special Permit Application – Summary of Application

Project Name:	MIT Wind Turbine
Address of Site:	106 Vassar Street and 296 Vassar Street
Applicant:	Massachusetts Institute of Technology
Planning Board Project Number:	(CDD)

Hearing Timeline (CDD)

Application Date:	12 February 2010	
Planning Board 1 st Hearing Date: <i>(PUD Development Proposal, other special permit)</i>	_____	*
Planning Board Preliminary Determination: <i>(PUD Development Proposal)</i>	_____	*
Second Submission Date: <i>(PUD Final Development Plan)</i>	_____	*
Planning Board 2 nd Hearing Date: <i>(PUD Final Development Plan)</i>	_____	*
Final Planning Board Action Date: <i>(PUD Final Development Plan, other special permit)</i>	_____	*
Deadline for Filing Decision:	_____	*

**Subject to extension by mutual agreement of the Applicant and the Planning Board*

Requested Relief: (include other boards and commissions)

- Article 11, Section 11.43 Wind Turbine Installation Permitted by Special Permit

Project Description

Brief Narrative: MIT proposes to install one (1) freestanding 2.4 kW Skystream wind turbine on its main campus for the purposes of education, research, and small scale generation of electricity for on-site consumption.

Project Size:

- Total GFA: Not Applicable
- Non-residential uses GFA: Not Applicable
- Site Area (acres and SF): 64.07 acres or 2,790,855 square feet
- # of Parking Spaces: Not Applicable

Proposed Uses:

- # of Dwelling Units: Not Applicable
- Other Uses
- Open Space (% of the site and SF): Not Applicable

Proposed Dimensions:

- Height: 67.5 feet (combined height of tower/wind turbine)
- FAR: Not Applicable

2. Introduction and Project Description

Project Description

MIT proposes to install one (1) freestanding 2.4 kW Skystream wind turbine on its main campus for the purposes of education, research, and small scale generation of electricity for on-site consumption. The turbine will be mounted atop a 60' freestanding monopole tower constructed of tubular steel with a 14.21" diameter at its base, tapering to 6.17" diameter at its top. The total height of the monopole tower and wind turbine will be 67.5', measured from the base of the monopole to the apex of the rotor blades. The wind turbine propeller features three fiberglass reinforced composite blades with a diameter of 12'. The wind turbine will be white in color, and the monopole tower will be grey. The monopole tower will be mounted to a concrete pier foundation. Underground electrical conduit will run from the base of the turbine to the nearest transformer connection.

MIT is proposing to install one wind turbine, but is submitting two sites for approval. MIT is currently conducting wind analyses at both sites to determine which has the best conditions for the most efficient operation of the turbine. MIT plans to install a single wind turbine at the site which produces the best results.

Site I: Steinbrenner Stadium

The proposed wind turbine site at Steinbrenner Stadium is located on the western portion of the MIT campus, bounded on the north by Vassar Street and on the south by Amherst Alley, an MIT-owned private way. The turbine would be placed near the southwest corner of Steinbrenner Stadium, on the edge of the small practice field bounded on the north by the stadium, on the east by the Jack Barry Astro Turf soccer field, and on the south by the Carr Indoor Tennis Facility (Building W53) (see Exhibit 1a & 3a). Adjacent structures on the site include the Carr Indoor Tennis Facility 125 feet to the south, and the Johnson Athletic Center (Building W34) 500' to the east. The surrounding land uses include athletic fields, MIT athletic buildings, and parking lots (See Exhibit 2a).

Site II: Briggs Field

The proposed wind turbine site at Briggs Field is located on the western portion of the MIT campus, bounded on the north by Vassar Street and on the south by Amherst Alley, an MIT-owned private way. The turbine would be placed on the far western portion of the site, on the grass between the two existing soccer fields, to the east of the fence of the adjacent Westgate parking lot (See Exhibit 1b & 3b). There are no adjacent structures located on the site. The closest building to the proposed wind turbine is the MIT Westgate dormitory, situated 290 ft. to the west. The surrounding land uses are comprised of athletic fields, parking lots, and MIT residential dormitories (see Exhibit 2b).

Noise Rating

When the rotor is turning, the noise rating for the wind turbine is 45 decibels at 40 ft. The proposed sites at Briggs Field and Steinbrenner Stadium are located 250' and 350', respectively, from Vassar Street, the nearest public right-of-way. The wind turbine meets the requirements of the Cambridge Noise Ordinance, Table 8.16.060E, Table of Zoning District Noise Standards, which permits a maximum allowable octave band sound pressure level in a residentially zoned area of 60 dB(A) during the daytime and 50 dB(A) at all other times, measured at the property line.

Operational Plan

The wind turbine will be located on MIT property, and will be operated by the MIT Department of Facilities, Operations Division.

Maintenance Schedule

Maintenance of the wind turbine will be conducted using a bucket-truck or lift, as there is no tilt-down option for this type of monopole tower. On-site maintenance of the wind turbine will be conducted entirely on MIT property, without trespass onto city streets or adjacent lots held in different ownership. The condition of the wind turbine will be monitored by the MIT Department of Facilities, and maintained as needed.

3. A narrative discussion of the extent to which the operation of the proposed equipment will generate continuous shadows, intermittent shadows (a.k.a. flicker), and/or noise that may be detected from adjacent properties and from the public street.

Given the narrow diameter of the monopole tower (6.17" – 14.21") and narrow profile of the rotor blades, shadow impacts from the wind turbine will be minimal. Shadows from the two respective turbine sites will fall on MIT property, given the 250'-350' distance from Vassar Street from the proposed locations. According to the wind turbine manufacturer, the impacts of flicker shadows from spinning turbine blades will be virtually undetectable due to the relatively high speed of rotation at operating speed. The blades of the wind turbine do not rotate until a wind speed of 8 mph has been attained.

4. Photo simulations or other representations, from at least two vantage points (one of which should be from a public street), illustrating the proposal in its physical context.

See Photo Simulations - Exhibit 6a (View 1: Existing), Exhibit 6a (View 1: Proposed)
Exhibit 6b (View 2: Existing), Exhibit 6b (View 2: Proposed)
Exhibit 6c (View 1: Existing), Exhibit 6c (View 1: Proposed)
Exhibit 6d (View 2: Existing), Exhibit 6d (View 2: Proposed)

3. Conformance with Cambridge Zoning Ordinance

11.43 Wind Turbine Installation Permitted by Special Permit

Wind Turbine Installations not meeting the requirements of Section 11.42 above (including commercial applications and freestanding equipment) may be permitted anywhere in the city only after the granting of a special permit from the Planning Board subject to the following conditions and limitations.

Installation of wind turbine equipment as a principal use for the express purpose of the commercial selling of the energy generated shall be permitted only in non-residential zoning districts. In residential districts such commercial use is not permitted. However, it is understood that in those residential districts a portion of the energy generated by the facility that is not immediately consumed on-site may at times be sold back or credited to the local-serving power utility. Furthermore, a cooperative facility serving multiple adjacent properties shall be permitted and may share the output of the facility without being considered a commercial use.

Energy generated from the wind turbine will be consumed on-site, and will not be sold commercially.

11.43.1 Dimensional Limitations

(1) Height. There shall be no maximum height limit but all heights proposed shall be specifically approved by the Planning Board.

The total height of the monopole tower and wind turbine will be 67.5', measured from the base of the monopole to the apex of the rotor blades.

(2) Setbacks. There shall be no required minimum yard setbacks for the wind turbine, but all setbacks proposed shall be specifically approved by the Planning Board. All equipment and structures accessory to the wind turbine shall be subject to the yard requirements of the applicable zoning district unless waived by the Planning Board.

At the proposed Steinbrenner Stadium site, the wind turbine will be set back 350' from the property line at Vassar Street, the nearest public way. At the proposed Briggs Field site, the wind turbine will be set back 250' from the property line at Vassar Street. There will be no additional equipment or structures accessory to the wind turbine and tower.

11.43.2 Other Limitations and Requirements

(1) The wind turbine shall be free from any appurtenances with the exception of equipment necessary to monitor, regulate, secure, and maintain the installation and the electricity it may produce. No sign may be attached to the installation equipment with the exception of unobtrusive manufacturer identification and operational guidance informational signs. No cellular or mobile phone equipment may be attached to the installation equipment.

The wind turbine features an internal wireless transmitter to allow for monitoring of energy production totals. This transmitter is contained completely within the turbine. No signage or cellular/mobile phone equipment will be attached to the installation. A small freestanding information kiosk and dedication plaque is being contemplated for placement adjacent to the wind turbine.

(2) The equipment shall not be independently lighted except as may be required by any local, state or federal regulation.

The wind turbine and tower will not be lighted.

(3) Equipment shall be painted in subdued tones of white, black, silver, grey, dark green, brown, blue or similarly subdued, non-reflective color unless otherwise required by local, state and/or federal regulations or allowed by the Planning Board.

The wind turbine will be white in color, and the monopole tower will be grey.

(4) Where mounted on a building, the Installation shall be well integrated with the architecture of the building.

Not Applicable.

(5) Where feasible, recognizing the potential unique prominence of some wind turbines, the Installation should be screened from view from public streets and from adjacent properties. Where their visibility cannot be minimized, the installation should be thoughtfully integrated into the larger urban landscape, with a recognition that a facility has the potential to provide an iconic, positive focal point in the landscape.

The two proposed sites are athletic fields, and in both cases the wind turbine will be visible from Vassar Street, the nearest public way. However, given the narrow diameter of the monopole tower (6.17" – 14.21"), narrow profile of the rotor blades, and 250'-350' distance from Vassar Street, the wind turbine will not have a significant visual impact on the landscape in either location. The turbine will be the most visually prominent when viewed from the adjacent MIT athletic fields, and will serve as a strong symbol of MIT's commitment to energy research and education.

See Photo Simulations

(6) In operation the equipment shall meet the requirements of the Cambridge Noise Ordinance, cumulatively for all equipment installed at a single location. All equipment shall be rated for noise generation so that it can be evaluated prior to installation.

When the rotor is turning, the noise rating for the wind turbine is 45 decibels at 40 ft. The proposed sites at Briggs Field and Steinbrenner Stadium are located 250' and 350', respectively, from Vassar Street, the nearest public right-of-way. The wind turbine meets the requirements of the Cambridge Noise Ordinance, Table 8.16.060E, Table of Zoning District Noise Standards, which permits a maximum allowable octave band sound pressure level in a residentially zoned area of 60 dB(A) during the daytime and 50 db(A) at all other times, measured at the property line.

(7) The site shall be capable of accommodating the laydown of the equipment without trespass onto city streets or adjacent lots held in a different ownership.

The construction and maintenance of the wind turbine will be conducted using a bucket-truck or lift, as there is no tilt-down option for this type of monopole tower. On-site maintenance of the wind turbine

will be conducted entirely on MIT property, without trespass onto city streets or adjacent lots held in a different ownership.

(8) Turbines shall be designed and located so as to prevent unauthorized access and otherwise be maintained in a safe operating condition.

Both proposed turbine sites are located on MIT athletic fields, and will be situated behind existing fences. The condition of the wind turbine and monopole tower will be monitored and maintained regularly.

(9) Abandonment. Given the unique safety considerations associated with wind turbines, abandonment of the facility through disuse for a period of two years, non-functioning equipment that is unrepaired for more than 100 days, or failure to request an extension of a special permit, where that special permit may have been time-limited by the Planning Board, shall obligate the owner to remove the equipment. Failure to remove the installation 150 days after any one of these threshold events occurs, the City of Cambridge shall have the authority to enter the property and remove the installation at the expense of the owner/operator where it finds that the equipment constitutes a hazard to the general public. At or before issuance of a building permit for the Installation, the permittee shall post a bond or other surety in a form and in an amount acceptable to the City that shall cover the cost of removal of the Installation by the City should that be necessary, such bond amount to be consistent with estimates for removal prepared at the permittee's expense by a qualified engineer. The surety mechanism shall account for cost of living adjustments over the expected life of the facility.

Prior to the issuance of a building permit, MIT will post a bond or other surety for removal of the wind turbine installation.

11.43.4 Standards for Granting of the Special Permit

In addition to the criteria established in Section 10.43 of the Zoning Ordinance for the granting of a special permit, the Planning Board shall consider the following specific criteria.

1. The visual impact of the Installation on the abutting properties and the neighborhood. In recognition of the fact that an Installation of any significant size will introduce a physical structure and form not typical of most residential and commercial neighborhoods in the city, the Planning Board shall consider the following when assessing whether a proposal has any unreasonable negative impacts on neighborhood character or adjacent uses: size, scale and bulk of the Installation in relationship to the scale of typical building and other elements in the neighborhood; the visibility and impact of the installation from important view corridors and viewsheds; the nature of adjacent uses, including the historical and architectural quality of the buildings containing those uses, the consistency of that architectural character over an extended area, and the extent to which the Installation is well integrated with that character. Where an Installation is proposed in an Open Space District or near an open space facility, particularly one with a significant natural aspect, the Installation's impact on any conservation, historic, or recreational value should be carefully analyzed.

The two proposed sites are athletic fields, and in both cases the wind turbine will be visible from Vassar Street, the nearest public way. However, given the narrow diameter of the monopole tower (6.17" – 14.21"), narrow profile of the rotor blades, and 250'-350' distance from Vassar Street, the wind turbine

will not have a negative visual impact on abutting properties or the neighborhood. The size, scale and bulk of the turbine is compatible with the adjacent buildings in the neighborhood, which consist of MIT-owned residence halls, athletic buildings and academic buildings, as well as MIT fraternities. The wind turbine will have a profile similar to that of a light pole, and will blend into the landscape at both locations. At the Briggs Field site, the wind turbine and tower will be of similar size and scale of the adjacent light poles in the Westgate parking lot. At the Steinbrenner Stadium site, the wind turbine will be lower in height and narrower in diameter than the adjacent 70' tall stadium lights. The small scale of the wind turbine ensures the installation will not have a significant impact on view sheds and view corridors towards adjacent architectural and natural features surrounding the site. The wind turbine will not have a negative impact on the MIT athletic fields adjacent to the installation.

2. The extent, frequency and duration of continuous and intermittent shadows and their relationship to interior spaces and places people will regularly occupy. Such impacts should be minimized and directed away from sensitive spaces in residential environments. It shall be the burden of the applicant to demonstrate that there shall be no significant adverse impact on adjacent properties.

Given the narrow diameter of the monopole tower (6.17" – 14.21") and narrow profile of the rotor blades, shadow impacts from the wind turbine will be minimal. Shadows from the two respective turbine sites will fall on MIT property, given the 250'-350' distance from Vassar Street for the proposed locations. According to the wind turbine manufacture, the impacts of flicker shadows from spinning turbine blades will be virtually undetectable due to the relatively high speed of rotation at operating speed. The blades of the wind turbine do not rotate until a wind speed of 8 mph has been attained. Shadows will fall on MIT athletic fields and parking lots, and will have no impact on the public right-of-way or any interior spaces.

3. The extent of detectable noise and vibration impact on neighboring uses.

The wind turbine will have minimal noise and vibration impact on neighboring uses. When the rotor is turning, the noise rating for the wind turbine is 45 decibels at 40 ft. The proposed sites at Briggs Field and Steinbrenner Stadium are located 250' and 350', respectively, from Vassar Street, the nearest public right-of-way. The wind turbine meets the requirements of the Cambridge Noise Ordinance, Table 8.16.060E, Table of Zoning District Noise Standards, which permits a maximum allowable octave band sound pressure level in a residentially zoned area of 60 dB(A) during the daytime and 50 dB(A) at all other times, measured at the property line.

4. Other factors with regard to the operational and visual impacts of the Installation that suggest that a time limitation should be imposed on the permit.

There are no other factors in regard to the operational and visual impacts of the wind turbine installation that suggest the need for imposing a time limit on the permit.

4. Dimensional Table

	Allowed/Required	Existing	Proposed	Granted
Total FAR	3	0.8	0.8	
Residential	-	-	-	
Non-Residential	-	-	-	
Inclusionary Bonus	-	-	-	
Total GFA in Sq. Ft.	8,372,565 s.f.	2,232,619 s.f.	2,232,619 s.f.	
Residential	-	-	-	
Non-Residential	-	-	-	
Inclusionary Bonus	-	-	-	
Max. Height	-	-	67.5'	
Range of heights	-	-	-	
Lot Size	-	2,790,855 s.f.	2,790,855 s.f.	
Lot area/du	N/A	N/A	N/A	
Total Dwelling Units	N/A	N/A	N/A	
Base units	N/A	N/A	N/A	
Inclusionary units	N/A	N/A	N/A	
Min. Lot Width	N/A	N/A	N/A	
Min. Yard Setbacks	N/A	N/A	N/A	
Front	N/A	N/A	N/A	
Side, Left	N/A	N/A	N/A	
Side, Right	N/A	N/A	N/A	
Rear	N/A	N/A	N/A	
Total % Open Space	N/A	N/A	N/A	
Usable	N/A	N/A	N/A	
Other	N/A	N/A	N/A	
Off Street Parking	N/A	N/A	N/A	
Min #	N/A	N/A	N/A	
Max #	N/A	N/A	N/A	
Handicapped	N/A	N/A	N/A	
Bicycle Spaces	N/A	N/A	N/A	
Loading Bays	N/A	N/A	N/A	

5. Supporting Statement for Special Permit

Criteria. Special permits will normally be granted where specific provisions of this Ordinance are met, except when particulars of the location or use, not generally true of the district or of the uses permitted in it, would cause granting of such permit to be to the detriment of the public interest because:

(a) It appears that requirements of the ordinance cannot or will not be met.

All requirements of the ordinance will be met.

(b) Traffic generated or patterns of access or egress would cause congestion, hazard, or substantial change in established neighborhood character

The wind turbine and tower will generate no additional traffic and will not modify access or egress patterns.

(c) The continued operation of or the development of adjacent uses as permitted in the Zoning Ordinance would be adversely affected by the nature of the proposed use

The wind turbine and tower is consistent and compatible with the adjacent athletic fields, parking lots, residential dormitories, and academic uses.

(d) Nuisance or hazard would be created to the detriment of the health, safety and/or welfare of the occupant of the proposed use or the citizens of the City

The wind turbine and tower will not create a nuisance or hazard to the health, safety or welfare of persons occupying the site or the citizens of Cambridge.

(e) for other reasons, the proposed use would impair the integrity of the district or adjoining district, or otherwise derogate from the intent and purpose of this Ordinance

The proposed wind turbine use is consistent with the existing institutional uses permitted in the Residence C-3 District, and will not impair the integrity of the adjoining SD-6, BB, and OS districts, or otherwise derogate from the intent and purpose of the Ordinance.

(f) the new use or building construction is inconsistent with the Urban Design Objectives set forth in Section 19.30

The wind turbine and tower are consistent with the intent of the Urban Design objectives set forth in Section 19.30.

6. Ownership Certificate

OWNERSHIP CERTIFICATE – PLANNING BOARD SPECIAL PERMIT

This form is to be completed by the OWNER, signed, and returned to the Office of the Planning Board.

I hereby authorized: Massachusetts Institute of Technology
(Petitioner)

Address: 77 Massachusetts Avenue, Building NE49-2100, Cambridge, MA 02139-4307

to apply for a special permit for: Wind Turbine
(type of development)

on premises located at: 106 Vassar Street and 296 Vassar Street

for which the record title stands in the name of: Massachusetts Institute of Technology

whose address is: 77 Massachusetts Avenue, Building NE49-2100, Cambridge, MA 02139-4307

by a deed duly recorded in the Middlesex South District Registry of Deeds:

SITE I – Steinbrenner Stadium

Deed from Ella J. Souther to Massachusetts Institute of Technology dated May 12, 1924 recorded in Book 4732, Page 270 of land shown on Plan Book 322, Plan 11B

SITE II – Briggs Field

1. Deed from Oliver Ames to Massachusetts Institute of Technology dated May 26, 1924 recorded in Book 4733, Page 543 of a 378/1000 undivided interest in the land shown on Plan Book 322, Plan 11A
2. Deed from Hiram M. Burton et al, Trustees to Massachusetts Institute of Technology dated May 28, 1924 recorded in Book 4733, Page 545 of a 571/1000 undivided interest in the land shown on Plan Book 322, Plan 11A.
3. Deed from Oliver Ames, et al, Trustees to Massachusetts Institute of Technology dated May 26, 1924 recorded in Book 4733, Page 548 of a 51/1000 undivided interest in the land shown on Plan Book 322, Plan 11A
4. Deed from Edith C. C. Ames, et al, Trustees to Massachusetts Institute of Technology dated May 27, 1924 recorded in Book 4733, Page 551 of all right, title and interest in the land shown on Plan Book 322, Plan 11A

Signature of Land Owner
(If authorized Trustee, Officer or Agent, so identify)

Commonwealth of Massachusetts, County of Middlesex



The above named _____ personally appeared before me,

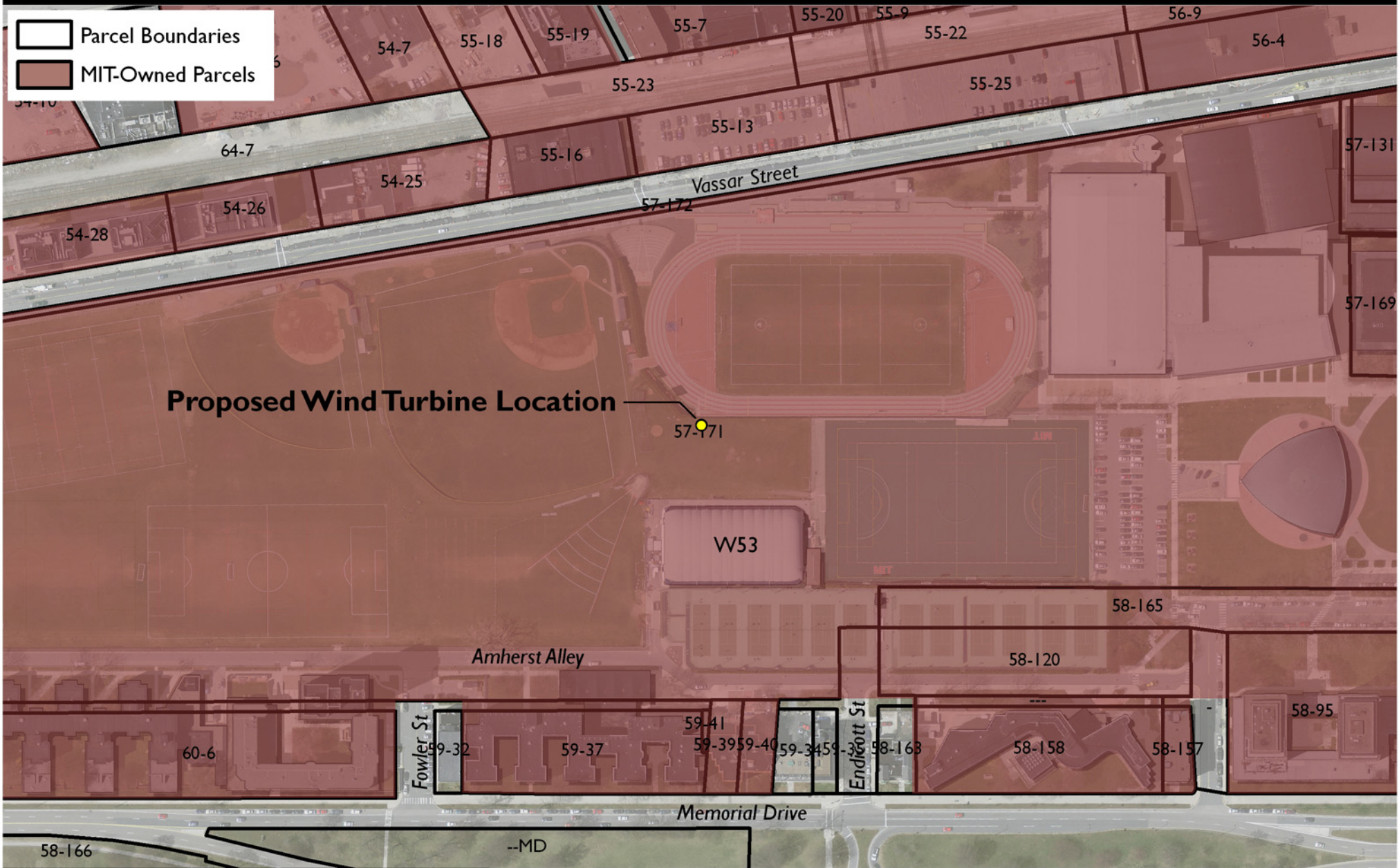
This _____ of _____, 2010 and made oath that the above statement is true.

Notary: _____



My Commission expires: _____

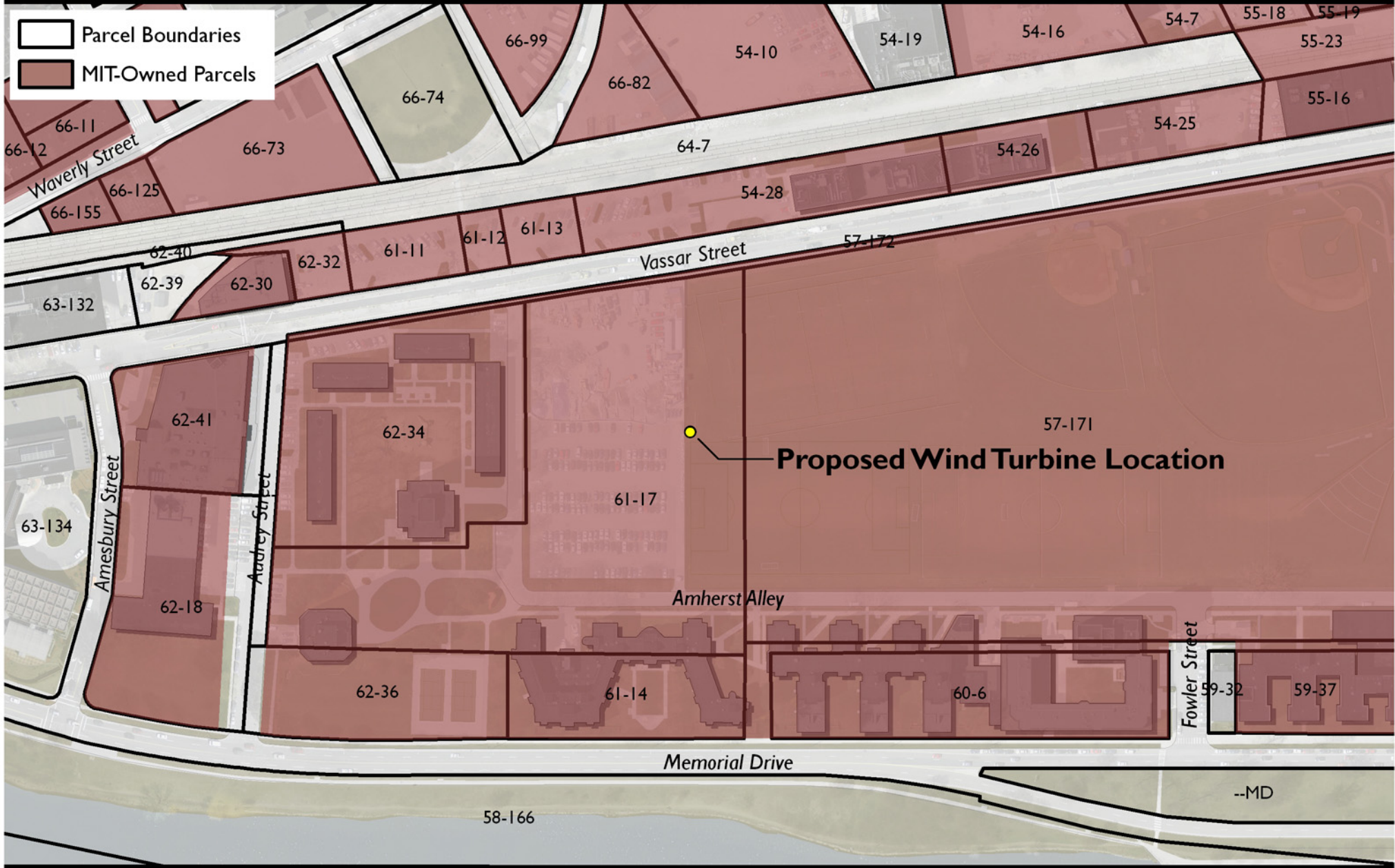
Existing Conditions Map - Site I: Steinbrenner Stadium

 Parcel Boundaries
 MIT-Owned Parcels



Existing Conditions Map - Site II: Briggs Field

-  Parcel Boundaries
-  MIT-Owned Parcels



Proposed Wind Turbine Location

Existing Conditions Photos - Site I: Steinbrenner Stadium



Site and Environs



Wind Turbine Installation Site



Steinbrenner Stadium, looking west

Existing Conditions Photos - Site II: Briggs Field



Site and Environs



Wind turbine installation site



Briggs Field, looking north

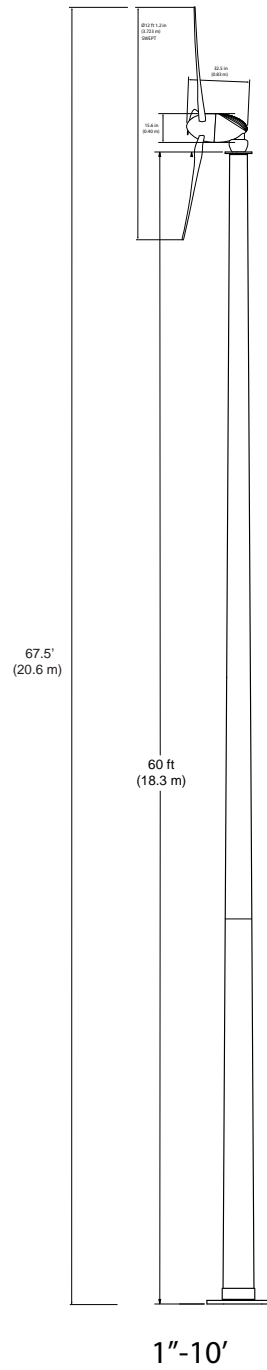
Wind Turbine Location - Site I: Steinbrenner Stadium



Wind Turbine Location - Site II: Briggs Field



Wind Turbine Elevation



Wind Turbine Elevation

SKYSTREAM^{3.7™} 60 ft (18.3 m) Monopole Tower

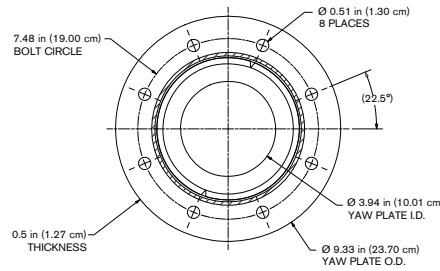
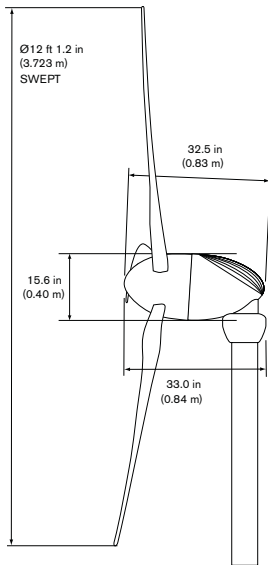
Technical Specifications

Tower: Freestanding Tapered Tubular Steel / Galvanized Finish
Tower Weight: 1500 lb (680.4 kg)

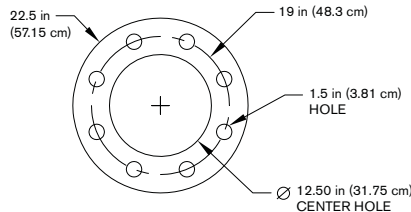
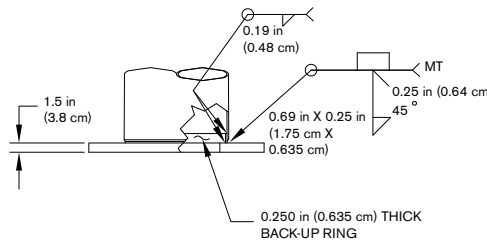
Top of Tower Loads at 146 mph (65.3 m/s) wind speed

Thrust Force: 630 lb (2802 N)
Peak Bending Moment: 1130 ft-lb (top of tower) (1532 N-m)
Downward Axial Force: 230 lb (1023 N)

*Loads do not include safety factor. SWWP recommends minimum safety factor of 1.5.



1. Tower Top

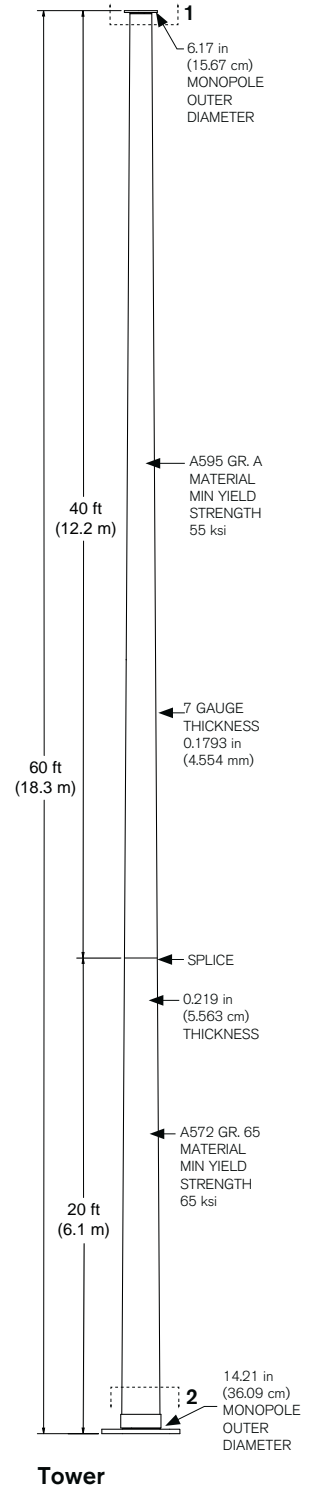


2. Tower Base

Dimensions

Prop Tip to Center of Tower: 31 in (79 cm)
Minimum Tip Clearance: 27 in (69 cm)
Max Tower Diameter at Tip: 8 in (20 cm)

Southwest Windpower
 1801 W. Route 66 • Flagstaff, AZ 86001
 Tel 928.779.9463 • Fax 928.779.1485
 www.skystreamenergy.com



Tower

3-CMLT-1093-03 REV NC 7-07



Wind Turbine Photos



Exhibit 6a

Photo Simulation - Site I: Steinbrenner Stadium

View I: Existing



Locus Map



Massachusetts Institute of Technology
Department of Facilities
Campus Planning + Design

Exhibit 6a

Photo Simulation - Site I: Steinbrenner Stadium

View I: Proposed



Locus Map



Massachusetts Institute of Technology
Department of Facilities
Campus Planning + Design

Exhibit 6b

Photo Simulation - Site I: Steinbrenner Stadium

View II: Existing



Locus Map



Massachusetts Institute of Technology
Department of Facilities
Campus Planning + Design

Exhibit 6b

Photo Simulation - Site I: Steinbrenner Stadium

View II: Proposed



Locus Map



Massachusetts Institute of Technology
Department of Facilities
Campus Planning + Design

Exhibit 6c

Photo Simulation - Site II: Briggs Field

View I: Existing



Locus Map



Massachusetts Institute of Technology
Department of Facilities
Campus Planning + Design

Exhibit 6c

Photo Simulation - Site II: Briggs Field

View I: Proposed



Locus Map



Massachusetts Institute of Technology
Department of Facilities
Campus Planning + Design

Exhibit 6d

Photo Simulation - Site II: Briggs Field

View II: Existing



Locus Map



Massachusetts Institute of Technology
Department of Facilities
Campus Planning + Design

Exhibit 6d

Photo Simulation - Site II: Briggs Field

View II: Proposed



Locus Map



Massachusetts Institute of Technology
Department of Facilities
Campus Planning + Design