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GLOUCESTER, MA

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GLOUCESTER CITY COUNCIL

9 Dale Avenue, Gloucester, MA 01930
Office (978) 281-9720 Fax (978) 282-3051
CITY COUNCIL STANDING COMMITTEE

Budget & Finance Committee

Thursday, January 20, 2011 – 6:00 p.m.
1st Fl. Council Conference Rm. – City Hall

AGENDA

(Items May Be Taken Out of Order)

1. **Continued Business**
 - A) CC2010-081 (Verga) Request to purchase Speed Study Equipment (Cont'd from 12/02/10)
 - B) Talbot Rink Sustainability from Revenues (Cont'd from 01/06/11)
 - C) Grant Application Process (Cont'd from 01/06/11)
2. **Memo re: Newell Stadium & the City of Gloucester Community Challenge Incentive & Loan Authorization Request**
3. **Special Budgetary Transfer Request (#2011-SBT-9) from Treasurer/Collector's Office**
4. **Special Budgetary Request (#2011-SBT-10) from Treasurer/Collector's Office**
5. **Grant Application & Checklist from Police Dept. re: FY11 Underage Alcohol Enforcement Grant**
6. **Grant Application & Check List from Comm. Dev. Dept. re: \$85,000 grant from Mass Clean Energy Center**
7. **Grant Application & Check List from Comm. Dev. Dept. re: Mass Green Communities to secure Funding to replace boiler system at the Beeman Elementary School, etc.**
8. **Communication from Emergency Management Director Miles Schlichte re: Emergency Management Performance Grant in the amount of \$11,000**
9. **Letter from DESE to Supt. Joseph Connelly related to end of year financial reporting**
10. **Letter from Gloucester Retirement Board re: Supplemental Pension Allowance to Surviving Spouses of Disabled Employees**
11. **Letter from Gloucester Retirement Board re: Cost of Living Increase for Retirees**
12. **Essex North Shore Agriculture & Technical School District By-Laws, Vote to authorize borrowing For New District High School Project, and School Financing Plan**
13. **Memorandum regarding Mass Bays Program Research & Planning Grants for FY2011**
14. **Memo from City Auditor regarding accounts having expenditures which exceed their authorization**

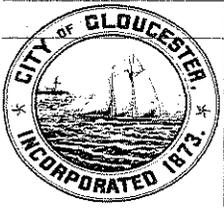
COMMITTEE

Councilor Steven Curcuru, Chair
Councilor Paul McGeary, Vice Chair
Councilor Jacqueline Hardy

Committee members – Please bring relevant documentation

Back-up and Supporting Documentation on file at the City Clerk's Office, City Hall

CC: Mayor Carolyn Kirk
Jim Duggan
Kenny Costa
Jeffrey Towne
Police Chief Michael Lane
Michael Hale
Sarah Garcia
Deputy Fire Chief Miles Schlichte
Superintendent Joseph Connelly
Tom Markham



**CITY OF GLOUCESTER 2010
CITY COUNCIL ORDER**

ORDER: #CC2010-081
Councillor Greg Verga

DATE RECEIVED BY COUNCIL: 11/23/10
REFERRED TO: B&F and Police Dept.
FOR COUNCIL VOTE:

ORDERED that the City Council via the Budget and Finance Committee review with the Police Department the possibility of the City purchasing Speed Study Equipment. Further, that the City pursue a funding source for said equipment within existing budgets and/or through grant opportunities.

Councillor Greg Verga

Chapter 44, Sec. 53A-1/2 to accept a donation of a 1977 CF Mack 1250 GPM Pumper from the Town of Lynnfield, said pumper with an anticipated dollar value not to exceed \$5,000.00.

3. CC2010-081 (Verga) Request to purchase Speed Study Equipment

Police Chief Lane discussed that a while ago he had spoken to Mr. Duggan about a JAMAR speed recording unit. This came about because Councilor Verga, other Councilors and members of the Traffic Commission expressed an interest to have the police do studies for establishing speed limits; and to have for police to monitor speed in City neighborhoods when ward Councilors receive complaints from constituents and looking to have speed limits reduced. A JAMAR recorder is a weatherproof device the size of small microwave box with a radar gun and downloads the information to a computer (like the laptops in the cruisers). It will show the speed; and very often show the majority of cars are travelling the speed limit; thereby disproving excessive speed but would also show excessive speed as well. The units cost about \$5,000.00 each. They didn't have a funding source, and "it went by the wayside." Councilor Verga brought the order back, originated by former Councilor Devlin, back with Councilor McGeary. The Chief had also spoken with Robert Ryan, Traffic Commission chairman. If they were to acquire one of these machines, the Police Department would have one or two people assigned to it, and Mr. Ryan could use it also at any time. It is inconspicuous and gets a true reading on traffic flow and speeds. Afterwards the State comes in and does their own study for setting the speed limit; but they would listen to their recommendations. On inquiry from **Councilor McGeary**, he stated this data would be acceptable to the State for the primary study which has to be forwarded to them with the request for a change in a speed limit, as it state-of-the-art technology. At present he does not have funds for its purchase.

Councilor McGeary explained he put in an order about camera speed tracking devices for speed enforcement; and with permission he received from Councilor Verga he would offer an amendment to Councilor Verga's original order. These are speed cameras that work like red light cameras. They use radar technology, get a picture of it, and could issue a ticket with it. He noted as ward Councilors they get complaints from constituents frequently about speeding vehicles on the roads.

Chief Lane thought they had to identify the driver in order to give a ticket for speeding.

Councilor McGeary stated the system has a camera technology that can now show the license plate and driver clearly. His research showed the cameras have sufficient quality to see the plate and driver.

Chief Lane thought it would be worth looking into. When they get these requests, it ties up one cruiser out of the four on the street for hours. It also doesn't give a true reading. He thought this kind of system would be better. They may find some of these complaints will be unjustified when they are able to have accurate readings.

Councilor Hardy stated when drivers see the cruisers they slow down and don't get a true reading.

Councilor McGeary noted the tying up of one policeman.

Chief Lane spoke of the dedication of Mr. Ryan and how he would commit to learning to use the equipment. If he could find the funding he would because the Traffic Commission is a volunteer group. It is technology that may not be as important as a laptop, per se, but he believed it was worthwhile.

Councilor Curcuru toured the Police Department recently and made note that they have cleaned up the station; that the Chief has done a great job with it.

Chief Lane stated they're working on a project now which would speed up report writing capabilities on the laptops (the police report system); with Officers Fitzgerald and Bouchie playing a key roles.

Councilor Curcuru asked about dashboard cameras.

Chief Lane stated they are expensive, around \$10,000.00 per camera. They do have the technology with the laptops and if they had them, it would just be a matter of feeding them into the laptops. He didn't know of any grants available for this. However, he would do some further research on the subject and bring that back to the Committee. He also noted the Police Department had a grant application for underage drinking prevention (surveillance, patrols, shoulder taps, etc.) and would be bringing it forward shortly which had an in-kind match.

MOTION: On motion by Councilor McGeary, seconded by Councilor Hardy, the Budget & Finance Committee voted 3 in favor, 0 opposed amended CC2010-081 (Verga) to read as follows: **ORDERED** that the City Council via Budget & Finance Committee review with the Police Department the possibility of the City purchasing Speed Study Equipment, and for the purchase and use of camera equipment for enforcing speed limits on city streets. Further that the City pursue a funding source for said equipment within existing budgets and/or through grant opportunities. Greg Verga, Paul McGeary, City Councilors.”

This matter was continued to January 20, 2011.

4. *Certified Free Cash:*

a) *Request by the Administration re: Distribution of 2010 Certified Free Cash*

Mr. Duggan spoke to the Committee about the distribution of the 2010 certified free cash. Apologizing for the confusion about not having this go through the formal requests of transfers through the Mayor's Packet, he explained to the Committee before them were three requests for three separate appropriations. The first appropriation is a request for \$177,000.00 for repairs which includes \$27,000.00 for the High School Boy's Locker Rooms, a request from Dr. Connelly, Superintendent, noting the Administration was in "complete support of that"; and an additional \$150,000.00 for repairs to other school buildings. This will be under the control and direction of the DPW account. The two other appropriation requests were for \$50,000.00 unreserved fund balance by the School Department for the Main Office Contingency as outlined in a memo from the Mayor to the City Council in its packet (on file) to compliment the \$100,000.00 the School Department budgeted for contract negotiations with the teachers. The third appropriation is \$60,000.00 from the Enterprise Fund for legal purposes. The EPA denied the City's 301(H) waiver for the NPDES Discharge Permit for the Waste Water Treatment Facility. This would enable the City to hire experts in the legal field to help strategize the City's position relative to the denial of the draft permit. They are trying to get the review done within the public comment period which ends January 18, 2011; unless submitted and challenged by then they will not have the opportunity again.

Councilor Hardy asked, referring to the legal matter, if the City would ask for an extension of the public comment period.

Mr. Duggan stated that extension had already been received which took it out to January 18th which gave the City an extra 45 days from the original 30 days. This period would already have expired.

Mr. Hale stated the EPA gave them a very short window once the permit denial was issued. It was just 30 days. The City requested additional time and it was granted.

On inquiry by **Councilor Hardy**, **Mr. Duggan** stated that Attorney Egan did extensive research and reached out to her peers in the legal community and felt comfortable with the legal team she has recommended. This legal firm has had very successful experience in this; and that \$60,000 is felt to be an adequate amount.

Councilor Hardy asked for an explanation of the \$177,000.00 appropriation from the schools.

Dr. Joseph Connelly, Superintendent of Schools recounted that in late August they discovered the very poor condition of the boys' locker room at Gloucester High School. He shared the plan for improved supervision and to find the best way to generate more respect for the facility he believed was by having the students be involved with the refurbishment and maintenance of the room. Working with the high school administration, they created a plan to replace the damaged lockers and get the students involved in the painting and doing murals on the walls. They are purchasing white boards and bulletin boards that had been previously been removed. With Mr. Hale's help he identified 125 lockers from the Fuller School they thought they could be used, but they weren't the right size; the high school lockers are oversized. The locker company that he contacted had actually made the original installation of lockers in the boys locker room went to Fuller with him and found the lockers were of a poor quality and wouldn't last very long. They had planned on Saturday October 23rd for the painting and refurbishment, but

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CITY OF GLOUCESTER
OFFICE OF THE MAYOR

MEMORANDUM

TO: City Council *C. Kirk*
FR: Mayor Kirk
RE: Newell Stadium - City of Gloucester Community Challenge Incentive and Loan Authorization Request
DT: January 5, 2011

Dear Councilors,

Happy New Year! 2011 promises to be both challenging in terms of the FY12 budget, but also a positive year in terms of being able to move forward on long-awaited initiatives. Because the fiscal foundation of the city is now solid, the Administration is confident about taking action on some long overdue projects.

The reward for three years of austerity, the hard work we have all put into closing the deficits, and getting the fiscal house in order, is that the city is in a stronger position to give back to the community in important ways.

Newell Stadium - Existing Conditions

The complete rehabilitation of Newell Stadium is a long-overdue, and much deserved initiative that seems fitting to tackle at this time for many reasons:

- Gloucester's championship track teams have not been able to host a home track meets in at least 5 years due to the deplorable and unsafe condition of the track;
- Gloucester's championship cross country teams have not had an adequate practice facility in many years;
- The boys and girls soccer teams, and field hockey, are restricted to varsity only teams rather than including junior varsity and freshmen programs due to concerns about overuse of the field;
- The lacrosse teams have limited access to the field at Newell Stadium due to the fragile nature of the existing turf under certain weather conditions;
- A new turf field could accommodate to a much greater extent the city's volunteer youth football program, soccer program, lacrosse program, and adult sports leagues;
- High school graduation ceremonies are in jeopardy of being held outdoors as is tradition due to the condition of the bleachers. Home games with large crowds are also in jeopardy due to the bleachers;
- And last but not least, the Gloucester High School football program which has produced three Superbowl championships in the last 4 years, plays at one of the worst fields in the state.

All told, well over 1,000 Gloucester children participate in sports that would benefit from, as the Gloucester Fishermen's Athletic Association puts it, a "Home to Excellence."

Proposed Project and Funding Approach

The total cost of the Newell Stadium renovation project is estimated at \$3.5 million. The proposed funding sources are as follows:

SOURCE	DESCRIPTION	AMOUNT
Community Donations	<p>The GFAA is leading a fundraising effort which includes:</p> <ul style="list-style-type: none"> • Major gifts from individuals, foundations, and corporate sponsors; • \$1,000 by 1,000 campaign which is a grassroots outreach effort to commit 1,000 people to donate \$1,000 a piece. <p><i>Just over 10% of the fundraising goal has already been achieved.</i></p>	\$1,500,000
City of Gloucester – Community Challenge Incentive	The Administration is proposing that the city of Gloucester match the community donations in the amount of \$1.5 million. Putting the proposal forward at this time serves as an incentive to the community to contribute now, and make a new Newell Stadium a reality for a 2011 ground-breaking.	\$1,500,000
State Grant	<p>The city, Senator Tarr, Representative Ferrante, and the GFAA are jointly pursuing a state PARC grant. The PARC Program assists cities and towns in acquiring and developing land for park and outdoor recreation purposes.</p> <p>Only projects that are to be developed for suitable outdoor recreation purposes, whether active or passive in nature, shall be considered for funding. Grants are available for the acquisition of land and the construction, or renovation of park and outdoor recreation facilities, such as swimming pools, zoos, athletic play fields, playgrounds and game courts. Access by the general public is required.</p>	\$500,000
TOTAL	The renovated stadium will include: bleachers set on pilings, wheelchair access, synthetic turf, properly sized for all relevant sports, and new track.	\$3,500,000

It is no exaggeration to state that this is the philanthropic opportunity of this generation. All Gloucester's great institutions have been built on philanthropy – Stacy Boulevard, Sawyer Free Library, Addison Gilbert Hospital, and so much of our wonderful open space and parkland. I heartily encourage the City Council to support this initiative by approving the enclosed loan authorization request for the renovation of Newell Stadium in the amount of \$1.5 million. Thank you.

City Hall
Nine Dale Avenue
Gloucester, MA 01930



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jtowne@gloucester-ma.gov

CITY OF GLOUCESTER
OFFICE OF THE TREASURER/COLLECTOR

MEMORANDUM

TO: Mayor Carolyn A. Kirk
FROM: Jeffrey Towne, CFO 
RE: Loan Order - Newell Stadium
DATE: January 5, 2011

Per our conversation regarding the Newell Stadium renovation, following is the language which should be forwarded to the City Council:

ORDERED: that \$3,500,000 is appropriated to pay costs of making various improvements to Newell Stadium, including, among other things, track and field facilities, a multipurpose athletic field, spectator seating, ADA and lighting improvements, irrigation and building improvements, and for the payment of all other costs incidental and related thereto; that to meet this appropriation the Treasurer with the approval of the Mayor is authorized to borrow \$1,500,000 under G.L. c.44, §7(25) or pursuant to any other enabling legislation; that the Mayor is authorized to contract for and expend any federal or state aid available for the project; and that the Mayor is authorized to take any other action necessary to carry out this project, including the acceptance of any private grants or gifts received by the City on account of this project. The Treasurer is authorized to file an application with the Municipal Finance Oversight Board to qualify under Chapter 44A of the General Laws any or all of the bonds authorized by this order and to provide such information and execute such documents as the Municipal Finance oversight Board may require for these purposes.

I will be available to provide further information to the City Council, as well as to answer any questions they may have.

**City of Gloucester
Special Budgetary Transfer Request
Fiscal Year 2011**

INTER-departmental requiring City Council approval - 6 Votes Required
 INTRA-departmental requiring City Council approval - Majority Vote Required

TRANSFER # 2011-SBT- 9 *Auditor's Use Only*

DEPARTMENT REQUESTING TRANSFER: Treasurer/Collector

DATE: 12/2/2010 BALANCE IN ACCOUNT: \$ 15,994.50

(FROM) PERSONAL SERVICES ACCOUNT # 101000.10.145.51200.0000.00.000.00.051
Unifund Account #

(FROM) ORDINARY EXPENSE ACCOUNT # _____
Unifund Account #
Treasurer/Collector, Salary Wages Temporary
Account Description

DETAILED EXPLANATION OF SURPLUS: Have not hire temporary help yet. Lag funds.

(TO) PERSONAL SERVICES ACCOUNT # 101000.10.141.51100.0000.00.000.00.051
Unifund Account #

(TO) ORDINARY EXPENSE ACCOUNT # _____
Unifund Account #
Assessors, Sal/Wages Perm Position
Account Description

DETAILED ANALYSIS OF NEED(S): To fund deficit in account.

TOTAL TRANSFER AMOUNT: \$ 4,917.04 NEW BALANCE IN ACCOUNTS AFTER TRANSFER
 FROM ACCOUNT: \$ 11,077.46
 TO ACCOUNT: \$ _____

APPROVALS:

DEPT. HEAD: *John Stouwe* DATE: 12/2/10
 ADMINISTRATION: *[Signature]* DATE: 1/5/11
 BUDGET & FINANCE: _____ DATE: _____
 CITY COUNCIL: _____ DATE: _____

**City of Gloucester
Special Budgetary Transfer Request
Fiscal Year 2011**

INTER-departmental requiring City Council approval - 6 Votes Required
 INTRA-departmental requiring City Council approval - Majority Vote Required

TRANSFER # 2011-SBT- 10 Auditor's Use Only

DEPARTMENT REQUESTING TRANSFER: Treasurer/Collector

DATE: 12/2/2010 BALANCE IN ACCOUNT: \$ 11,077.46

(FROM) PERSONAL SERVICES ACCOUNT # Unifund Account # 101000.10.145.51200.0000.00.000.00.051

(FROM) ORDINARY EXPENSE ACCOUNT # Unifund Account #
Treasurer/Collector, Salary Wages Temporary
Account Description

DETAILED EXPLANATION OF SURPLUS: Have not hired temporary help yet. Lag funds.

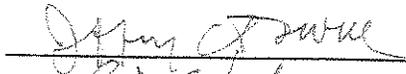
(TO) PERSONAL SERVICES ACCOUNT # Unifund Account # 101000.10.151.51100.0000.00.000.00.051

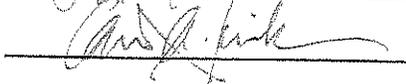
(TO) ORDINARY EXPENSE ACCOUNT # Unifund Account #
City Legal Dept, Sal/Wage - Perm Position
Account Description

DETAILED ANALYSIS OF NEED(S): To cover deficit. Contract settled after budget was approved.

TOTAL TRANSFER AMOUNT: \$ 420.23 NEW BALANCE IN ACCOUNTS AFTER TRANSFER
 FROM ACCOUNT: \$ 10,657.23
 TO ACCOUNT: \$ -

APPROVALS:

DEPT. HEAD:  DATE: 12/7/10

ADMINISTRATION:  DATE: 1/5/11

BUDGET & FINANCE: _____ DATE: _____

CITY COUNCIL: _____ DATE: _____

Chief Michael W. Lane

**Gloucester Police
Department**

MEMO

To: Jim Duggan, Chief Administrative Officer

From: Chief Michael W. Lane

CC:

Date: December 6, 2010

Re: Permission to Apply for Underage Drinking Enforcement Grant

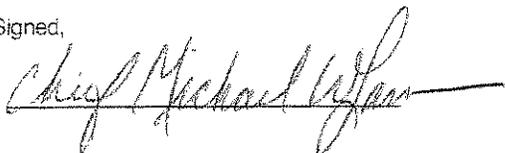
Jim,

The Gloucester Police Department recently received notification of the availability of grant funding opportunities to combat underage drinking. The grants are being offered by the Massachusetts Executive Office of Public Safety and Security. The grant funding is competitive in nature and applications must be submitted to that office prior to December 22, 2010. Awardees will receive notification in late January or early February 2011. If awarded, funds must be expended between February 1, 2011 and September 31, 2011. The potential award amount is for \$ 10,000.00 for cities and towns having populations over 30,000. Total funding available statewide is \$ 218,000. Funding would allow for liquor establishment compliance checks, surveillance patrols for underage drinking, underage alcohol procurement stings, cops in shops program, shoulder tap programs, and similar programs.

I respectfully ask that this request, along with attached supporting documentation, be submitted in the Mayors Report to the full City Council to be referred to the Budget and Finance SubCommittee for discussion and approval. There is a 20% "in-kind" match required for this grant.

Please feel free to contact me should you have any questions. Thank you .

Signed,



Chief Michael W. Lane



RECEIVED

DEC - 3 2010

Mayor's Office

City of Gloucester
Grant Application and Check List

Granting Authority: State V Federal _____ Other _____

Name of Grant: FFY 2011 UNDERAGE ALCOHOL ENFORCEMENT

Department Applying for Grant: POLICE

Agency-Federal or State application is requested from: PUBLIC SAFETY

Object of the application: REDUCE # OF UNDERAGE IMPAIRED DRIVERS

Any match requirements: 25% IN-KIND (SOFT) MATCH

Mayor's approval to proceed: [Signature] 1/5/11
Signature Date

City Council's referral to Budget & Finance Standing Committee: _____
Vote Date

Budget & Finance Standing Committee: _____
Positive or Negative Recommendation Date

City Council's Approval or Rejection: _____
Vote Date

City Clerk's Certification of Vote to City Auditor: _____
Certification Date

City Auditor:
Assignment of account title and value of grant: _____
Title Amount

Auditor's distribution to managing department: _____
Department Date sent

NOTE: A copy of all grant paperwork must be submitted to the Auditor's Office

**Commonwealth of Massachusetts
Executive Office of Public Safety and Security
Office of Grants and Research
Highway Safety Division
10 Park Plaza, Suite 3720
Boston, MA 02116
Tel: 617.725.3341**

**New Availability for Grant Funds
FFY 2011 Underage Alcohol Enforcement Grant Program
Deadline for Applications: Noon, December 22, 2010**

The Executive Office of Public Safety and Security (EOPSS), Office of Grants and Research (OGR), Highway Safety Division (HSD) announces the availability of up to \$218,580 in grant funding in federal fiscal year 2011 for eligible municipal, college, and university law enforcement agencies for underage alcohol enforcement.

Contracts awarded under this application will be for the period of approximately February 1, 2011 through September 30, 2011.

To be eligible for FFY 2011 grant funding, departments must submit a Grant Application and required forms. The Narrative, Grant Application, and required forms are posted on www.mass.gov/highwaysafety under "FFY 2011 Underage Alcohol Enforcement Grant".

Questions about the application and technical assistance can be directed to Dan DeMille at Daniel.DeMille@state.ma.us or 617.725.3341.

Grant award announcements are anticipated on or about February 1, 2011.

OVERVIEW OF THE PROBLEM

Motor vehicle crashes are the leading cause of death among young drivers between ages 15 and 20. Young drivers lack driving experience and have difficulty scanning their environments to detect imminent hazards. Coupling alcohol with these limitations worsens these driving weaknesses; additionally, after drinking young drivers tend to engage in other risky driving behaviors such as speeding, running red lights, making illegal turns, and not wearing seat belts.

Although much progress has been made in the last two decades, alcohol-related crashes are all too common among young people. According to the National Highway Safety Transportation Administration (NHTSA), in 2008, nationwide, 31% of 15 to 20 year-olds who were killed in crashes had a blood alcohol content of .01 or higher. Drivers are also less likely to use restraints when they have been drinking. In 2008, 63% of the young drivers of passenger vehicles involved in fatal crashes who had been drinking were unrestrained. Of the young drivers who had been drinking and were killed in crashes, 73% were unrestrained.

Any loss or injury on our roadways is one too many. EOPSS-HSD recognizes that traffic crashes are preventable. Massachusetts is committed to reducing the number of motor vehicle-related fatalities, injuries, and economic losses resulting from these crashes.

SCOPE OF SERVICES

Research and experience confirms strong enforcement helps to reduce underage drinking by limiting access to alcohol, reducing opportunities for youth to drink, and curbing impaired driving. Consistent, vigorous enforcement reinforces the message that adults and youth must be responsible for their actions and that violating the law is unacceptable. Enforcement helps to validate the activities of prevention specialists and can help treatment specialists to identify youth in need of help.

EOPSS/HSD encourages applicants to review the following for programming strategies and ideas prior to applying for grant funding.

NHTSA and the Governors Highway Safety Association have developed a series of "how to" guidebooks that cover all aspects of developing community coalitions to focus on underage drinking and drinking and driving. This *Community How To Guide on Underage Drinking Enforcement* details what coalitions and organizations need to do to ensure that enforcement and the judiciary are active partners in the effort to reduce underage drinking.

[http://www.nhtsa.dot.gov/people/injury/alcohol/Community%20Guides%20HTML/Book 5 Enforcement.html](http://www.nhtsa.dot.gov/people/injury/alcohol/Community%20Guides%20HTML/Book%205%20Enforcement.html)

The Pacific Institute for Research and Evaluation (PIRE) developed and evaluated enforcement strategies including sobriety checkpoints, enforcement of sales regulations to intoxicated patrons, and compliance checks to enforce laws against alcohol sales to minors. PIRE also provides training to law enforcement leadership and line officers in efficient and effective application of these strategies.

www.pire.org

GRANT PROGRAM DETAILS

Eligible Activities

- Reverse Stings – This program places two undercover police officers, acting as door or bar personnel, in a participating bar or nightclub. The undercover police officers stop anyone who looks to be under the age of 21 who attempts to purchase alcohol or who uses or possesses false identification. A third officer is placed outside the licensed premises to observe outside activity and to transport and process underage individuals who are placed under arrest.
- Underage Stings/Compliance Checks – This program sends a person who is under 21 years of age into a retail store, bar, restaurant or nightclub to attempt to purchase alcohol with no identification.
- Cops in Shops – This program places one undercover police officer in a participating package store to stop anyone under 21 who attempts to purchase alcohol, or uses false

identification. A second officer is placed outside to observe adults purchasing for or delivering alcohol to minors.

- Shoulder Taps -With this program, under the direct supervision of law enforcement officers, a minor solicits adults outside licensed stores to buy the minor alcohol. Any person seen furnishing alcohol to the minor decoy is arrested.
- Party Patrols – This allows a police department to have dedicated patrols for breaking up underage parties. This program works well with Cops in Shops – an officer outside the package store may observe a person (21+) getting into a vehicle that is going to a party where underage drinking may take place.
- Surveillance Patrols – In conjunction with above programs, conduct surveillance in areas of suspected underage drinking (i.e. athletic events).

Program Goals

- Award grants to approximately 35 qualified municipal, college and university law enforcement agencies. This number is dependent on the number of qualified applicants and available federal funding.
- To decrease the number of young drivers (age 20 or younger) involved in fatal crashes from a five-year average (2005-2009) of 68.6 by five percent to 65.2 in 2011.
- Enhance and evaluate the impact of efforts to reduce impaired driving by younger drivers and underage drinking.

Eligibility, Program Details, and Other Requirements

- All municipal, college and university law enforcement agencies with chapter 90 powers are eligible for grant funding.
- Activity will be conducted approximately February 1, 2011 through September 30, 2011. Some peak dates may be required by the HSD. All awards are based on the availability of federal funding.
- Non-participation or non-compliance with performance measures may result in contract suspension, termination or non-reimbursement of expenses.
- Patrols for any alcohol enforcement program shall not be less than two hours and not more than four hours in length.
- Patrols should be scheduled on Thursdays through Sundays and only after 6:00 p.m. Patrols may also be scheduled outside of these times with sufficient notice and justification to HSD.
- Departments working on grant-funded patrols must have at least one officer certified in the Alcoholic Beverages Control Commission (ABCC) compliance check trainings. For departments that do not meet this criteria, training will be offered free of charge and will be held at a centrally located facility. Date(s) are to be announced.
- All activity must be performed pursuant to Massachusetts State laws.
- Departments will participate in press events, trainings, and meetings as necessary. There will be mandatory regional grant administration trainings held within two weeks of grant announcements.
- All subrecipients must comply with the Federal Funding Accountability and Transparency Act as will be further instructed by EOPSS prior to contracting.

- Subrecipients that expend \$500,000 or more in a year in federal awards shall have a single or program-specific audit conducted for that year in accordance with the provisions of the Office of Management and Budget's Circular A-133. The Office of Grants and Research annually asks subrecipient fiscal managers to complete a form certifying that this requirement has been met and that there are no audit findings associated with the use of these funds. The FY 2009 certifications are due now. All applicants must check the attached A-133 spreadsheet. If your organization is listed and a "Y" does not appear in the "Form Returned?" column, you must submit the form with your application in order to be eligible to receive funds from this AGF. OR IF YOUR CITY OR TOWN HAS NOT COMPLETED AND SUBMITTED ITS A-133, YOU WILL BE REQUIRED TO DO SO BEFORE A CONTRACT WITH BE EXECUTED.
- All subrecipients must complete an Equal Employment Opportunity Plan (EEO) certification form, responding to either Section A- Declaration Claiming Complete Exemption from the EEO Requirement, Section B- Declaration Claiming Exemption from the EEO Submission Requirement and Certifying that an EEO Is on File for Review or Section C-Declaration Claiming EEO Submission Requirement. Some subrecipients may be required to submit their EEO or EEO Short Form to the U.S. Department of Justice, Office for Civil Rights. Each Subrecipient's Certification, EEO, or EEO Short Form will need to be submitted to OGR in accordance with 28 CFR 42.301-308. Details will be provided prior to contracting.
- The Anti-Lobbying Act of 18 U.S. Code § 1913 prohibits the use of federal funds for "grassroots" campaigns that encourage third parties, members of special interest groups or the general public to contact members of Congress or of a State or local legislative or an official of any government in support of or in opposition to a legislative, policy or appropriations matter. It applies to activities both before and after the introduction of legislation.
- In addition to the requirements set forth above, subrecipients will be required to agree to and abide by all state and federal rules, regulations, and conditions pertaining to the receipt, administration, and management of federal funding.

Regional Approach

- Local police departments may team up for a "regional approach."
 - One community must act as the lead applicant/fiduciary agent.
 - All funds will be distributed to the lead applicant only.
 - Lead applicant will be responsible for completion of all reimbursement forms, etc.
 - Lead applicant will be responsible for dispersal of funds to participating communities within 30 days of receipt of payment from EOPSS-HSD.
 - Participating communities must submit Letters of Commitment/Memoranda of Understanding signed by official authorized to enter into an agreement with the Commonwealth and a fiscal agent.
 - When filling out the application, there must be detailed information and specific roles of each participating community included.

- Population figures and other statistics listed in Application should be based on the combined total of involved communities.
- Each participating community must submit a signed copy of the signed "Assurances" page.

Reporting and Record Keeping

- Expenditure, activity and in-kind match reports must be submitted each month, no later than the 15th of the month following activity. All reporting forms will be made available to departments in hard-copy form and at www.mass.gov/highwaysafety, under the "FFY 2011 Underage Alcohol Enforcement Grant Program" link.
- Reporting forms must be signed in blue ink and an original and one copy submitted to the HSD by mail. Electronic signatures and faxed copies of these reports will not be accepted. Failure to submit reports on assigned dates will result in non-reimbursement.

Public Outreach and Notification of Enforcement Activities

- Advance public notification and follow-up of enforcement activity is required. The EOPSS-HSD will provide sample news releases for department use by mail and on the EOPSS-HSD website at www.mass.gov/highwaysafety, under the "FFY 2011 Underage Alcohol Enforcement Grant" link. Newspaper clippings generated by department press releases and reports of local radio and TV coverage should be included with grant reports as well as posted on department/community websites and in annual reports.
- All public communications and/or news releases concerning any grant activity shall indicate that the project is funded by the EOPSS.

GRANT BUDGET DETAILS

- This is a cost reimbursement grant.
- Grants will be awarded in amounts up to \$15,000 based on population.
- The following is a breakdown of funding allocations:

Estimated Population Based on 2008 Census	Maximum Funds
Up to 30,000	\$5,000
30,001 to 100,000	\$10,000
100,001+	\$15,000

- Departments must justify the need for funding for these activities and how funding will be spent.
- The Underage Alcohol Enforcement Grant Program is for **overtime enforcement**.
- Funding for this grant program is subject to the continuing availability of federal funds.

- No department should begin enforcement efforts until a contract has been signed by the department and EOPSS-HSD and notification has been issued. **No costs incurred before a department receives written notification will be reimbursed.** There can be no exceptions.
- Due to the federal and state budget cycles, grant recipients must submit two estimated budgets: one for February 1 to June 30, 2011 and one for July 1 to September 30, 2011. If a grant recipient will expend all awarded funds before June 30, then no July 1 to September 30 budget is required.
- This grant must not be used to pay for any supervisor time. Command staff may participate in enforcement details if conducting enforcement.
- Non-enforcement supervisor time can be accounted for in the in-kind budget.
- No funds will be provided for indirect costs associated with the grants.
- If additional federal funds become available, funding and eligible departments may be awarded based on submission of applications from this original application.

Part-time or Auxiliary Officers

- The use of part-time or auxiliary officers who have attended an approved Massachusetts Municipal Police Training Committee Reserve/Intermittent academy is allowed. Part-time officers on EOPSS-funded initiatives must be under the supervision or control of a full-time command officer.

Safety Belt Policy

- Departments must establish and enforce a written safety belt policy which must be submitted with your application. A copy of the International Association of Chiefs of Police recommended policy is located at www.mass.gov/highwaysafety.
- Departments without a written safety belt policy may apply for grant funding, but awards will be reduced by 50%.

Supplanting

- Supplanting of funds is prohibited.
- Funds for programs and services provided through this grant are intended to supplement, not supplant, other state or local funding sources.

Required In-Kind Match

- Grant recipients are required to provide an in-kind (soft) match which represents 20% of the total project cost or 25% of the grant award. To determine your department's minimum In-Kind Match, EOPSS/HSD uses the following formula:
Award x .25 = Minimum In-Kind Match
OR
(.20 x Total Award)/.80 = Minimum In-Kind Match
- Departments are required to submit a signed in-kind report with all activity and expenditure reports. Failure to submit an in-kind match report will result in delay or non-reimbursement.
- Applicants must ensure that their in-kind match is identified in a manner that guarantees its accountability during a review or an audit.

- Departments can only use their match once per grant with EOPSS-HSD.
- Matching funds cannot be from federal dollars from another grant.
- Indicate planned in-kind contributions by item and dollar amount on application. In-kind contributions can include estimated administrative costs and operational expenses that will be incurred by the department during the administration or performance of the grant. Examples may include but are not limited to:
 - Supplemented overtime for officers and/or supervisors
 - Fringe benefits and indirect costs for officers and/or supervisors
 - Materials, supplies, postage, project related telephone calls
 - Transportation/mileage for project meetings and associated trainings
 - Department webpage development
 - Preparation of financial reports for reimbursement
 - Preparation of activity reports
 - Educational sessions, specialized and roll call training costs and costs associated with court time
 - Department time for community presentations
 - Maintenance to cruisers and equipment
 - Supervisory time
 - Officer time to conduct traffic safety, alcohol and safety belt educational initiatives
 - Printing of any community-based public information materials and incentives

In-Kind Formula Chart:

Population based on estimated 2008 Census	Maximum Funds per Applicant	Minimum In-Kind (Soft) Match
Up to 30,000	\$5,000	\$1,250
30,001 to 100,000	\$10,000	\$2,500
100,001+	\$15,000	\$3,750

Examples of In-Kind Match Items:

Item	Rate/Hr, etc.	Total Cost
Grant Supervision	20 hours at \$32 per hour	\$640
Checkpoint	48 hours \$55 per hour	\$2,640
Volunteers	estimated \$10 per hour	\$1,000

Reimbursements

- Requests for reimbursements must be submitted in a timely manner after each month. Failure to meet reporting deadlines will result in non-reimbursement.
- This is a cost reimbursement grant program. Be sure to notify your Treasurer's Office so your reimbursement does not go into the General Fund.
- No department may begin enforcement efforts until a contract has been signed by the department and EOPSS and the department receives official notification from EOPSS-HSD. No costs incurred before the department receives written notification will be reimbursed. There will be no exceptions.

- Failure to comply with grant conditions will make a department ineligible for future Underage Alcohol Enforcement Grants.

SUBMISSION OF APPLICATION

A qualified application packet must be based on the attached grant application form and all required attachments.

For the initial application deadline, an original application form with attachments, along with three copies, must be received by mail or hand-delivery at HSD by noon, December 22, 2010. It is suggested that departments verify with EOPSS-HSD receipt of application prior to deadline. Please email Dan DeMille at Daniel.DeMille@state.ma.us to verify receipt.

Please direct application packets to:

Dan DeMille
Highway Safety Division
Executive Office of Public Safety and Security
10 Park Plaza, Suite 3720
Boston, MA 02116

Faxed and electronic responses will **NOT** be accepted. Departments will be notified of their award decision as contracts are approved.

SELECTION CRITERIA

Underage Alcohol Enforcement Grant Awards will be based on the following criteria:

- Strength and effectiveness of application, i.e. understanding of project, innovative approach to project
- Problem identification, i.e. evidence that objectives are based upon well-defined problems
- Applicant's capability to provide appropriate programs
- Team collaboration for the project across the community
- Demonstrated experience and credibility in statewide highway safety
- Budget detail and in-kind contributions
- Identification of realistic and measurable goals and objectives
- Evaluation component
- Self-sufficiency plan
- Best value to the Commonwealth
- Previous EOPSS/HSD contract experience

Incomplete responses or unsigned applications may be disqualified, though EOPSS does reserve the right to work with departments to obtain missing or incomplete information.

This narrative as well as the attached application are available at www.mass.gov/highwaysafety and then click on FFY 2011 Underage Alcohol Enforcement Grant.

City Hall Annex
Three Pond Road
Gloucester, MA 01930



TEL 978-281-9781
FAX 978-281-9779
sbuck@ci.gloucester.ma.us

CITY OF GLOUCESTER
COMMUNITY DEVELOPMENT DEPARTMENT

MEMORANDUM

TO: Mayor Carolyn Kirk
FROM: Sarah Garcia, Community Development Director *Sarah Garcia*
RE: Grant funding for Wind Turbine Feasibility Study Magnolia Woods Recreational Area
CC: Susan St. Pierre, Project Manager Clean Energy
Gregg Cademartori, City Planner
DATE: January 3, 2011

I am pleased to inform you that the City has been awarded an \$85,000 grant from the Massachusetts Clean Energy Center (MassCEC) to undertake a feasibility study for the installation of up to a 2MW wind turbine on City owned land in the vicinity of the Magnolia Woods Recreational Area. The Community Development staff will be working with the consulting firm of Meridian Associates to develop this study over the next several months. There is a small local match that is being met with the same Clean Energy green-up funds that support our part-time Clean Energy Project Manager.

Please forward our request to accept this grant to the City Council for their consideration.

Please also transmit to City Council, for information only, the City's application for a small research and planning grant from the Massachusetts Bays Program. We have requested \$22,000 for a study of climate change vulnerability from sea-level rise on selected public properties. The Planning Director and IT Department have partnered to provide in-kind (non-financial) support for this study.

Finally, as part of our successful designation as a Green Community, we are eligible for up to \$198,200 in grant funding for energy conservation or energy renewable projects. Our request for the funding is due January 21st. The Clean Energy Commission, in consultation with the school department, has identified a new boiler system at the Beeman School as the top priority. Depending on the final estimated cost of the boiler, the city may be able to apply for additional projects. The CEC is considering an assessment of the solar roof potential at the Beeman School and the High School, as well as considering addressing air leakage at City Hall and possibly an engineering study of a new HVAC system for the building.

Please transmit our request to the City Council to apply for the Green Communities funding.

Thank you.



City of Gloucester
Grant Application and Check List

Granting Authority: State Federal _____ Other _____

Name of Grant: MassCEC Commonwealth Wind, Community Wind Feasibility Study

Department Applying for Grant: Community Development Department

Agency-Federal or State application is requested from: Massachusetts Clean Energy Center

Object of the application: To retain Meridian Associates, Inc. to prepare a Feasibility Analysis of the city-owned Magnolia Woods site to determine the feasibility of installing up to a 2MW wind turbine

Any match requirements: Yes. \$85,000 grant with \$4,750 local match

Mayor's approval to proceed: See Attached Letter *[Signature]* 1/5/11
Signature Date

City Council's referral to Budget & Finance Standing Committee: _____
Vote Date

Budget & Finance Standing Committee: _____
Positive or Negative Recommendation Date

City Council's Approval or Rejection: _____
Vote Date

City Clerk's Certification of Vote to City Auditor: _____
Certification Date

City Auditor:
Assignment of account title and value of grant: _____
Title Amount

Auditor's distribution to managing department: _____
Department Date sent

NOTE: A copy of all grant paperwork must be submitted to the Auditor's Office

Susan St. Pierre

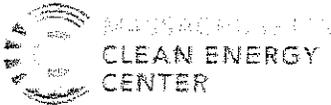
From: Martha Broad [MBroad@MassCEC.com]
Sent: Tuesday, November 09, 2010 4:22 PM
To: Martha Broad
Cc: Peter McPhee; Leigh Cameron; Christie Howe; Andy Brydges
Subject: Commonwealth Wind Community Scale Feasibility Award

We are pleased to inform you that the Massachusetts Clean Energy Center Director has approved your application to the Massachusetts Clean Energy Center for full funding through Block 4 of the Commonwealth Wind Incentive Program: Community Scale. MassCEC received 8 feasibility study proposals under this competitive grant solicitation requesting \$470,000 in funds. We are excited to be able to support your efforts as you develop this renewable energy project.

The Commonwealth Wind team asks that you coordinate any publicity efforts, including grant-related events and news media outreach, with our Communications Manager, Kate Plourd, who can be reached at (617) 315-9339 or kplourd@MassCEC.com. Kate may also be contacting you directly to discuss other publicity efforts, if applicable.

We look forward to working with you on the successful implementation of the Project and your assigned Project Manager will be in touch with a draft contract within the next week.

Martha Broad
Sr. Project Manager
Massachusetts Clean Energy Center
55 Summer St, 9th Floor Boston, MA 02110
Tel: 617-315-9312 Fax: 617-315-9356
mbroad@masscec.com www.masscec.com





CITY OF GLOUCESTER
Commonwealth Wind Feasibility Study Grant Application
Solicitation No. 2011-CWIPCS-01

Submitted to:

**Massachusetts Clean Energy Center
Commonwealth Wind Incentive Program: Community Scale
55 Summer Street, 9th Floor
Boston, MA 02110**

September 14, 2010

Index

Form A Authorized Applicant Signature and Acceptance Form

Form B-1 Site Assessment Deliverable

Form B-2 Feasibility Study Application

Appendix A – Support Letters

Appendix B – Recent Electric Bill

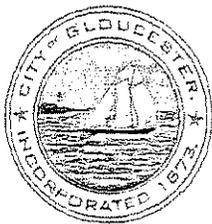
Appendix C – Purchasing Department Letter

Form C General Terms and Conditions

Form A

Authorized Applicant Signature and Acceptance Form

Small vertical text on the right edge of the page, likely a page number or reference code.



CITY OF GLOUCESTER
COMMUNITY DEVELOPMENT

3 POND ROAD • GLOUCESTER, MA 01930

TEL 978-281-9781

FAX 978-281-9779

September 14, 2010

Ms. Martha Broad
Massachusetts Clean Energy Center
55 Summer Street 9th Floor Boston, MA 02110

Re: CWIPCS Solicitation
Solicitation No. 2011-CWIPCS-01
City of Gloucester – Magnolia Woods Feasibility Study Grant Application

Dear Ms. Broad,

The City of Gloucester commits to providing 5% of the costs of the Magnolia Woods Community Wind Feasibility Study as cash match in the amount of \$4,750.00. Please note that the letter from the Mayor's Office noted the total amount to be \$2,500.00 but subsequent to the issuance of the Mayor's letter, the City was able to identify additional funding to cover the entire 5% match of \$4,750.00.

Additionally, the City will share data collected during the feasibility study as requested/directed by your agency.

Thank you for your consideration and all of your support in the City's efforts to develop renewable energy in the community. If you have any questions, please feel free to contact me at 978-281-9781 access # 7 or by cell phone at 781-439-2461.

Sincerely,

Susan St. Pierre
Project Manager, Clean Energy

City Hall
Nine Dale Avenue
Gloucester, MA 01930



TEL 978-281-9700
FAX 978-281-9738
cckirk@gloucester-ma.gov

CITY OF GLOUCESTER
OFFICE OF THE MAYOR

September 14, 2010

Ms. Martha Broad
Massachusetts Clean Energy Center
55 Summer Street 9th Floor
Boston, MA 02110

Re: CWIPCS Solicitation
Solicitation No. 2011-CWIPCS-01
City of Gloucester

Dear Ms. Broad,

The City of Gloucester is pleased to submit this Community Wind Feasibility Grant application for the City-owned Magnolia Woods site located in West Gloucester, MA. The development of renewable energy to both reduce the City's energy costs and to promote clean and renewable energy sources is one of the major goals of my administration. As you know, the City is currently involved in the preparation of a similar feasibility study for a city-owned site at the Blackburn Industrial Park.

Your agency approved the City's application for a Site Assessment application for Magnolia Woods in May of this year. The ongoing study has indicated that there is very good potential for operating a community-scale wind turbine at the site as detailed in the attached Form B-1 Site Assessment Deliverable. Based on the Site Assessment results of the Site Assessment, the City with support from the City's Clean Energy Commission decided to seek funding under the Commonwealth Wind Community Wind program.

As required by the grant program, we have secured the services of a well qualified consulting team Meridian Associates, Inc. who have provided similar services on projects funded by your agency. The City commits to providing 5% of the costs of the study as a cash match which at this time we anticipate to not exceed \$2,500. We are very excited about this opportunity and hope that the City's application receives a favorable review from your office. We look forward to working with you on this exciting project.

Sincerely,

Carolyn A. Kirk

Mayor



Commonwealth Wind

Feasibility Study and Design & Construction Grants (2011-CWIPCS-01)

Authorized Applicant's Signature and Acceptance Form

The undersigned is a duly authorized representative of the applicant listed below. The Applicant has read and understands the Solicitation requirements. The undersigned acknowledges that all of the terms and conditions of the Solicitation are mandatory.

The Applicant specifically acknowledges the application of the procedures regarding submission of sensitive information as set forth in Section 9.1.2 of the Solicitation, and specifically agrees that it shall be bound by those procedures. The applicant understands that all materials submitted as part of the application are subject to disclosure under the Massachusetts Public Records Law; and acknowledges and agrees that MassCEC has no obligation, and retain the sole discretion to fund or choose not to fund the application set forth herein, and that MassCEC's receipt of the application does not imply any promise of funding at any time.

The undersigned has either:

- checkbox specified exceptions and counterproposals to the Grant Agreement in the Application;
checkbox agreed to the terms and conditions of the Grant Agreement and has included an original, signed copy of with its Application; or
checkbox acknowledged that it has previously executed the Grant Agreement.

Please check one.

The undersigned acknowledges and agrees that the failure to submit exceptions and counterproposals with this Application shall be deemed a waiver and neither the Grant Agreement nor the task order shall be subject to further negotiation.

The applicant understands that, if selected by MassCEC, the applicant and MassCEC will detail and execute a Task Order that outlines the respective roles and responsibilities.

I certify that the statements made in this application, including all attachments and exhibits, are true and correct to the best of my knowledge.

Applicant: City of Gloucester, MA (Printed Name of Applicant)

By: [Signature] (Signature of Authorized Representative)

Name: Carolyn A. Kirk

Title: Mayor

Date: 9/13/10

Form B-1

Site Assessment Deliverables

Vertical text along the right edge of the page, likely a page number or reference code.

Step 1: Enter the information about your proposed wind energy system in the green boxes.

<-Mouse over these icons for relevant help

General information

Name of Person Completing this Form

Jeff Snyder

Applicant Name

City of Gloucester

Applicant Email Address

sstpierre@gloucester-ma.gov

Site Address

Western Ave, Gloucester, MA 01

Site and Wind Resource information

Latitude

42.5864

Longitude

-70.7050

Elevation

43m

Wind Resource Map Estimate of Average Annual Windspeed

5.8	m/s	30m above eff. ground level
6.5	m/s	50m above eff. ground level
7.1	m/s	70m above eff. ground level

Note: These windspeed estimates are a starting point. Using these values and the proposed site geographical information, to be entered in subsequent steps, CWEST1 will model the site conditions and provide a site specific wind resource estimate.

Go To Step 2

Note:

This calculator tool was developed by The Cadmus Group, Inc. on behalf of the Massachusetts Clean Energy Center (MCEC). It is intended to provide a coarse estimate of wind resources and neither The Cadmus Group, nor MCEC, makes any guarantees as to the actual resource availability for specific locations. Factors such as site condition parameters entered by the user, topography, geography, and other variables will all affect the model's resource estimation. The primary purpose of this tool is to predicate the probability of Wind Resource availability in Massachusetts. It is a preliminary rough estimate of what the likely wind resource is for the area of interest. It should not be used for system design. Should the resource estimate appear to be sufficient please contact a qualified wind turbine installer for a detailed site assessment.

For Questions or Comments on this calculator:

PTS@cadmusgroup.com

Step 2: Site Characteristics

Wind frequency numbers in the table below are automatically derived from the New England Wind Resource Map along with the entered coordinates. Use the pull down menus to describe the roughness of the terrain. If your site has thick vegetation or obstacles, such as forest, near (within 300 feet) of the tower base, estimate the average height of the obstacle and select an obstacle type from the drop down menu for each direction. Finally, you may proceed from this page to the Wind Resource Site Report. This report can be printed. If you wish to have a hard copy of the Wind Resource Site Report.

Units



Wind Direction	Frequency (Percent)	Terrain Roughness	Height of Nearby Obstacles	Obstacle Type	Description of Terrain/Obstacles
N	5.09%	Rough	50	Vegetation	deciduous 50ft forest
NNE	6.51%	Rough	50	Vegetation	deciduous 50ft forest
NE	4.97%	Moderate	0	Vegetation	open field
ENE	3.85%	Moderate	0	Vegetation	open field
E	2.53%	Moderate	0	Vegetation	open field
ESE	3.02%	Moderate	0	Vegetation	open field
SE	4.11%	Moderate	0	Vegetation	open field
SSE	5.60%	Moderate	0	Vegetation	open field
S	7.71%	Rough	50	Vegetation	deciduous 50ft forest
SSW	9.57%	Rough	50	Vegetation	deciduous 50ft forest
SW	9.55%	Rough	50	Vegetation	deciduous 50ft forest
WSW	6.72%	Rough	50	Vegetation	deciduous 50ft forest
W	7.27%	Rough	50	Vegetation	deciduous 50ft forest
WNW	8.80%	Rough	50	Vegetation	deciduous 50ft forest
NW	5.59%	Rough	50	Vegetation	deciduous 50ft forest
NNW	5.86%	Rough	50	Vegetation	deciduous 50ft forest

[Return to Step 1](#)

[Generate Wind Resource Site Report](#)

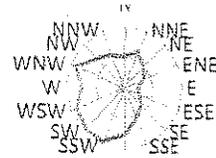
MCEC Commonwealth Wind Site Resource Report

Report Date: 9/14/2010
 Report Completed By: Jeff Snyder
 Site Name: City of Gloucester



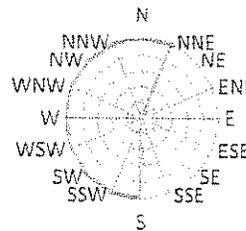
Site Information

Latitude (decimal degrees)	42.5864
Longitude (decimal degrees)	-70.7050
Elevation (m)	43



Direction	Frequency	Obstacle Height (m)	Description
N	5.09%	15	deciduous 50ft forest
NNE	6.51%	15	deciduous 50ft forest
NE	4.97%	0	open field
ENE	3.85%	0	open field
E	2.53%	0	open field
ESE	3.08%	0	open field
SE	4.11%	0	open field
SSE	5.60%	0	open field
S	7.71%	15	deciduous 50ft forest
SSW	9.57%	15	deciduous 50ft forest
SW	9.55%	15	deciduous 50ft forest
WSW	8.72%	15	deciduous 50ft forest
W	7.27%	15	deciduous 50ft forest
WNW	8.89%	15	deciduous 50ft forest
NW	6.69%	15	deciduous 50ft forest
NNW	5.86%	15	deciduous 50ft forest
Avg Obstacle Height (m)		10	

Obstacle Height (10 ft/division)



Wind Resource Statistics

Weibull k Value	2.23
Average Site Wind Shear Exponent	0.36

Wind Map Reference Height (m)	Wind Map Wind Speed (m/s)	Wind Speed Corrected for Site Factors (m/s)
30	5.8	5.1
50	6.5	6.1
70	7.1	6.8

Note: The average site wind shear exponent is based on empirical data for various terrain types and is calculated based on user inputs. It is recommended that the user use this value to estimate hub height wind speeds, rather than calculating a wind shear exponent based upon the wind speeds from the wind map, as these values are based on large scale computer models and do not accurately account for micro-siting conditions. The wind shear exponent is a mathematical representation of terrain roughness and is used to calculate wind speed as a function of height.

The data displayed in this report is intended for preliminary assessment purposes only and should be combined with an appropriate feasibility study to determine project viability. This tool has been developed by the Cadmus Group, Inc., on behalf of the Massachusetts Clean Energy Center. Wind resource data is derived from AWS Truewind New England Wind Map.

www.cadmusgroup.com

Questions:

ptsr@cadmusgroup.com

Step 1: Enter the information about your proposed wind energy system in the green boxes.

<-Mouse over these icons for relevant help

General Information

Name of Person Completing this Form
Applicant Name
Applicant Email Address
Site Address

Jeff Snyder
City of Gloucester
sstpierre@gloucester-ma.gov
Western Ave. Gloucester, MA 01

Site and Wind Resource Information

Latitude	42.5847
Longitude	-70.7001
Elevation	38m

Wind Resource Map Estimate of Average Annual Windspeed		
5.8	m/s	30m above eff. ground level
6.5	m/s	50m above eff. ground level
7.1	m/s	70m above eff. ground level

Note: These windspeed estimates are a starting point. Using these values and the proposed site geographical information, to be entered in subsequent steps, CWEST I will model the site conditions and provide a site specific wind resource estimate.

Go To Step 2

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For Questions or Comments on this calculator:

PTS@cadmusgroup.com

Step 2: Site Characteristics

Wind frequency numbers in the table below are automatically derived from the New England Wind Resource Map along with the entered coordinates. Use the pull down menus to describe the roughness of the terrain. If your site has thick vegetation or obstacles, such as forest, near (within 300 feet) of the tower base, estimate the average height of the obstacle and select an obstacle type from the drop down menu for each direction. Finally, you may proceed from this page to the Wind Resource Site Report. This report can be printed if you wish to have a hard copy of the Wind Resource Site Report.

Units ▼



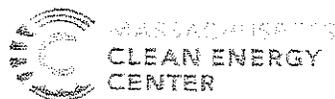
Wind Direction	Frequency (Percent)	Terrain Roughness	Height of Nearby Obstacles	Obstacle Type	Description of Terrain/Obstacles
N	5.09%	Rough ▼	40	Vegetation ▼	decidious 40ft forest
NNE	8.81%	Rough ▼	40	Vegetation ▼	decidious 40ft forest
NE	4.87%	Rough ▼	40	Vegetation ▼	decidious 40ft forest
ENE	3.85%	Rough ▼	40	Vegetation ▼	decidious 40ft forest
E	2.53%	Rough ▼	40	Vegetation ▼	decidious 40ft forest
ESE	3.08%	Rough ▼	40	Vegetation ▼	decidious 40ft forest
SE	4.11%	Rough ▼	40	Vegetation ▼	decidious 40ft forest
SSE	5.60%	Rough ▼	40	Vegetation ▼	decidious 40ft forest
S	7.71%	Rough ▼	40	Vegetation ▼	decidious 40ft forest
SSW	9.57%	Rough ▼	40	Vegetation ▼	decidious 40ft forest
SW	9.55%	Rough ▼	40	Vegetation ▼	decidious 40ft forest
WSW	8.72%	Rough ▼	40	Vegetation ▼	decidious 40ft forest
W	7.27%	Rough ▼	40	Vegetation ▼	decidious 40ft forest
WNW	8.89%	Rough ▼	40	Vegetation ▼	decidious 40ft forest
NW	6.69%	Rough ▼	40	Vegetation ▼	decidious 40ft forest
NNW	5.86%	Rough ▼	40	Vegetation ▼	decidious 40ft forest

[Return to Step 1](#)

[Generate Wind Resource Site Report](#)

MCEC Commonwealth Wind Site Resource Report

Report Date: 9/13/2010
 Report Completed By: Jeff Snyder
 Site Name: City of Gloucester



Site Information

Latitude (decimal degrees)	42.5847
Longitude (decimal degrees)	-70.7001
Elevation (m)	39

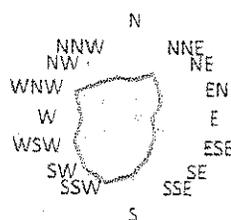
Direction	Frequency	Obstacle Height (m)	Description
N	5.09%	12	decidious 40ft forest
NNE	6.51%	12	decidious 40ft forest
NE	4.97%	12	decidious 40ft forest
ENE	3.85%	12	decidious 40ft forest
E	2.53%	12	decidious 40ft forest
ESE	3.08%	12	decidious 40ft forest
SE	4.11%	12	decidious 40ft forest
SSE	5.60%	12	decidious 40ft forest
S	7.71%	12	decidious 40ft forest
SSW	9.57%	12	decidious 40ft forest
SW	9.55%	12	decidious 40ft forest
WSW	8.72%	12	decidious 40ft forest
W	7.27%	12	decidious 40ft forest
WNW	8.89%	12	decidious 40ft forest
NW	6.69%	12	decidious 40ft forest
NNW	5.86%	12	decidious 40ft forest
Avg Obstacle Height (m)	12		

Wind Resource Statistics

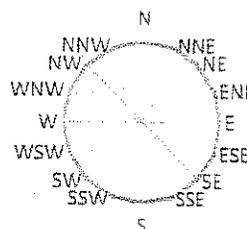
Weibull k Value	2.23
Average Site Wind Shear Exponent	0.37

Wind Map Reference Height (m)	Wind Map Wind Speed (m/s)	Wind Speed Corrected for Site Factors (m/s)
30	5.8	5.2
50	6.5	6.1
70	7.1	6.8

Site Wind Rose (5% frequency/division)



Obstacle Height (10 ft/division)



Note: The average site wind shear exponent is based on empirical data for various terrain types and is calculated based on user inputs. It is recommended that the user use this value to estimate hub height wind speeds, rather than calculating a wind shear exponent based upon the wind speeds from the wind map, as these values are based on large scale computer models and do not accurately account for micro-siting conditions. The wind shear exponent is a mathematical representation of terrain roughness and is used to calculate wind speed as a function of height.

The data displayed in this report is intended for preliminary assessment purposes only and should be combined with an appropriate feasibility study to determine project viability. This tool has been developed by the Cadmus Group, Inc., on behalf of the Massachusetts Clean Energy Center. Wind resource data is derived from AWS Truewind New England Wind Map.

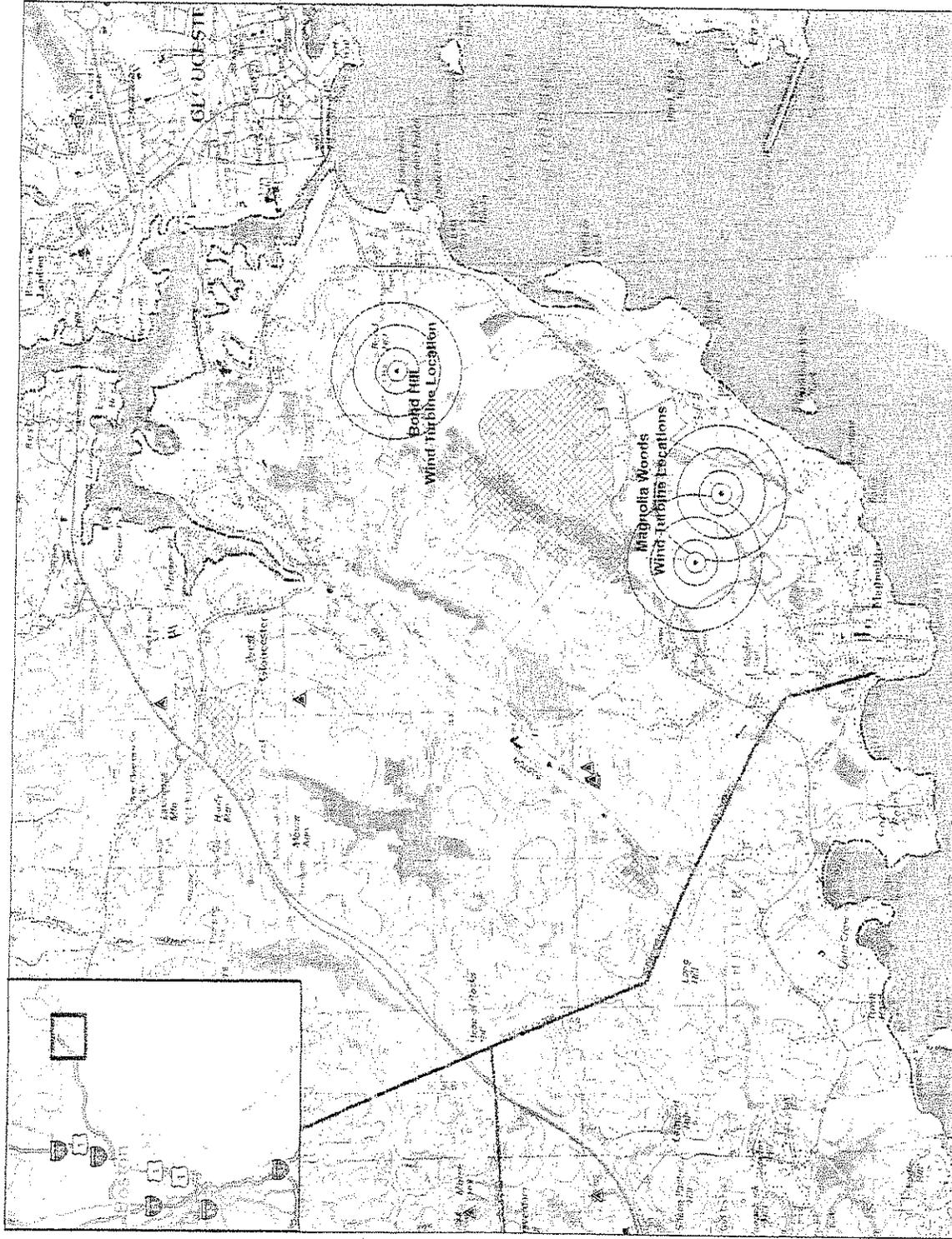
www.cadmusgroup.com

Questions:

pts@cadmusgroup.com

City of Gloucester, MA

Figure 1: Regional Site Map



- Proposed wind turbine locations
- 300', 1000', 1500' Concentric setbacks
- ▨ Magnolia Woods parcel
- ▨ Areas of Critical Environmental Concern
- ▨ Open Space protected wetland
- ▨ RHEST priority wetland
- ▨ DEP North Coast Watershed wetlands
- ▨ OPEN WATER
- ▨ SHALLOW MARSH MEADOW OR TERN SHEEP MOUND
- ▨ WOODED SWAMP/ DECIDUOUS
- ▨ WOODED SWAMP/ MIXED TREES
- ▨ FEMA registered antenna sites

Plan prepared: MASSGIS, City of Gloucester and Federal Aviation Administration



City of Gloucester, MA

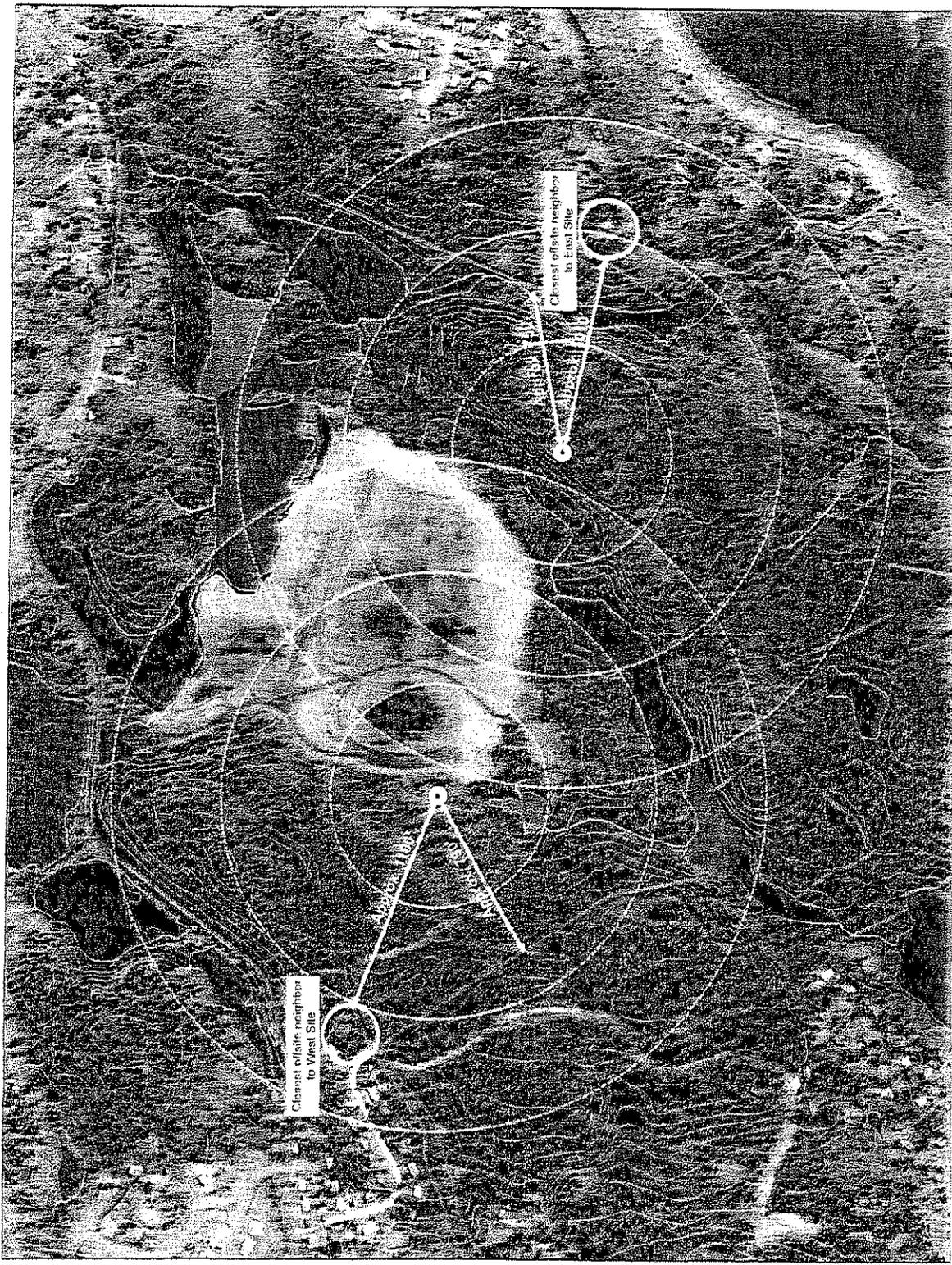
**Figure 2: Aerial Map
Magnolia Woods Site**

**Wind Turbine Locations
and
Environmental Features**

- Proposed wind turbine locations
- 500' 1000' 1500' Chesapeake Ashlarer
wind turbine property
- Main property lines
- Areas of Global Environmental Concern
- DEP North Coast Watershed wetlands
- OPEN WATER
- ROCKY INTERTIDAL SHORE
- SHALLOW BAY/SHOALS/FLATS
- SHRUB SWAMP
- WOODED SWAMP/DECIDUOUS
- WOODED SWAMP MIXED TREES
- Hydrologic noncontiguous wetland banks
- Electric distribution lines (4, 160 volts)



Data sources: MassGIS, City of Gloucester
and Google Earth Image



Form B-2

Feasibility Study Application



(1) Contact Information

Project Contact Name	Susan St. Pierre
Project Contact Phone #	(978) 281-9781 x 7
Project Contact Email	sstpierre@gloucester-ma.gov

(2) Site Information

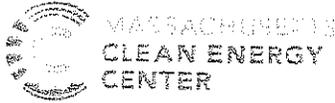
Latitude	West Site: 42.5864 East Site: 42.5847
Longitude	West Site: -70.7050 East Site: -70.7001
Elevation (ft)	West Site: 43m East Site: 39m
Annual On-site Electricity Consumption (kWh)	Gloucester's total electric usage for the 12-month period ending June 30, 2009, was 9,971,654 kWh.
Property Owner	City of Gloucester
Distribution Utility	National Grid
Is there an electric utility meter at the Site?	Yes
Electric Rate Class	Gloucester has 27 separately metered facilities in several Rate Classes in each of the general categories of G-1, G-2, and G-3.
Is the site serviced by three-phase electric power?	Yes
Does your municipality have a wind zoning bylaw? If so, provide a copy.	Yes. The zoning bylaw is attached.

(3) General Description of Property Use (1-2 Paragraphs – expand the boxes, as needed)

Describe the site, including information about: (a) property use, (b) open spaces on site, (c) buildings, trees or other obstacles, and (d) the surrounding neighborhood.

The Magnolia Woods site is located in the higher elevation forested peninsula on Cape Ann in Essex County, Massachusetts. Gloucester is part of Massachusetts' North Shore, and is located approximately 25 miles northeast of Boston. The site area being considered for wind turbines is in the sparsely populated West Gloucester neighborhood about 2.5 miles to the south west of Gloucester city. The Atlantic coast line is located about 1 mile south of the proposed site area, 4 miles to its east, and about 5 miles to its north. The proposed wind turbine site is locally high terrain, approximately 150 – 160 ft. above mean sea level with no higher land in any direction to block wind flow. The location of these features is shown in the Regional Site Map below.

The 277-acre parcel owned by the City of Gloucester that comprises Magnolia Woods is primarily forested land surrounding a large cleared area (~ 40 acres) that includes the former regional land fill. The land fill has been capped for over 10 years and has been redeveloped as improved athletic playing fields – five soccer and one baseball – that occupy approximately 25 cleared acres in the north central proportion of the property. The proposed wind turbine sites are located: 1) immediately to the west of the playing fields at approximately 150 ft. elevation, ("West Site") and 2) over 500 feet east of the playing fields at 150 ft. elevation, ("East Site"). Terrain in the area of the playing fields is level with slight slopes in drainage areas and averages approximately 150 – 160 ft. in elevation above mean sea level. A wetland area including an open water pond is located



to the north of the playing fields with a wooded swamp wetland wrapping around them to the east. Lands to the south and east of the playing fields are generally lower in elevation with wooded steeper slopes. They include streams and ponds, and are used for non-motorized hiking and picnicking. Terrain to the west rises to 180 – 185 ft. Public use of this property is promoted during the non-winter months though cross country skiing is a wintertime recreational activity. There are no inhabited buildings on the premises. The height of the forest canopy that surrounds the playing fields and open area is estimated to be 40 to 50 ft (12 to 15m).

(4) Land Use Restrictions

Identify any use restrictions on the proposed site (e.g. Article 97 Land) and please document that activities related to project development (i.e. wind monitoring) are allowed at the site.

City of Gloucester General Counsel provided certification that the Magnolia Woods parcel is not subject to conservation or other use restrictions.

(5) Wind Resource Assessment

Generate and attach the MassCEC Commonwealth Wind Site Resource Report from <http://cwest.cadmusweb.com/>. Please provide all 3 screens (*General Information, Site Characteristics, and The Commonwealth Wind Site Resource Report*).

These reports are attached.

(6) Energy Production and Usage Estimate

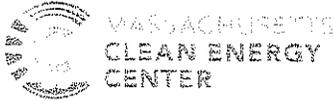
Provide an energy production estimate for up to three of the turbine models being considered for the site. For each turbine size being considered, this should include the following (add copies of this Table, as needed):

Turbine Capacity	1.6 MW
Turbine Manufacturer and Model	GE 1.6xle
Rotor Diameter	100m
Wind Speed Estimate at 70m	6.9 m/s (both West and East sites)
Hub Height	80m
Wind Speed Translated to Hub Height	6.9 m/s (both West and East sites)
Estimated Annual kWh Output	West Site: 3,646,000 kWh/yr East Site: 3,673,000 kWh/yr

(7) Aerial Site Map

A) Insert an aerial site map of the proposed turbine location that outlines the major property lines. Draw concentric rings on the aerial site map at 500 and 1000, and 1500 feet from the proposed turbine location. Identify the locations of the items referenced in the table below and indicate distance to nearest residence(s) and any other environmentally sensitive areas.

This map is attached.



B) If a wind bylaw is in place, indicate setback distances required by the bylaw (if no bylaw is in place or listed setbacks are not specified, please indicate "NA"):

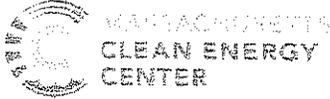
	Setback required	Distance (ft. or miles)*
Closest occupied structure	Minimum distance from shared property line shall be 150' and in no case less than the length of an individual turbine blade	West Site: ~ 1100 ft East Site: ~ 1010 ft
Closest publicly accessible space (ex. Schools, roads, bike paths, parks)	100 ft to public way; 150 ft to property boundary	Sites are on public land. Signage and other methods should be used to control access.
Closest offsite neighboring residential structure	Not specifically addressed in Ordinance	West Site ~ 1100 ft East Site ~ 1010 ft
Closest property line	Minimum distance from shared property line shall be 150' and in no case less than the length of an individual turbine blade	West Site ~ 790 ft East Site ~ 750 ft
Closest wetlands (if within 1000 feet)	Intermittent streams and activities within a 100-ft buffer zone are jurisdictional under the Wetlands Protection Act regulations.	West Site ~ 250 ft. from wooded swamp deciduous wetland East Site ~ 200 ft. from hydrologic connection
Communication towers/microwave towers (if within 3 miles)	Not specifically addressed in Ordinance	Off Kondelin Rd, several com towers note ~ 5,900 ft. WNW from a point between the proposed turbine locations

*Provide the shortest distance, from the proposed turbine location or locations to (note that applicant may be required to obtain a variance and/or special permit for setbacks that do not conform to local bylaws):

(8) Site Map (5 Mile Radius)

Insert an aerial site map indicating any airports within 5 miles of the property.

There are no airports within 5 miles of the property. The closest airport, the Beverly Municipal Airport, in Beverly, Massachusetts, is approximately 17.0 km (10.6 mi) to the west of the West Site. A 5-mile aerial site map is attached.



(9) Environmental/Permitting

Insert aerial site maps with a GIS overlay of:

- Areas of Critical Environmental Concern
- National Wetlands Inventory
- Protected and Recreational Open Space
- DCR or Locally Designated Scenic Landscapes
- State Register of Historic Places

An aerial site map with GIS overlays is attached.

Provide a commentary (1-2 paragraphs) on whether any of these Environmental/Permitting items could be a fatal flaw to the project.

Overall, no significant Environmental/Permitting concerns were identified as fatal flaws to the project. There are no Areas of Critical Environmental Concern that will be affected by the installation of wind turbines. The Massachusetts DEP North Coast Watershed wetlands identify a shallow marsh meadow wetland approximately 250 ft south of Magnolia Woods West Site. Magnolia Woods parcel is used primarily for athletic/recreational use, is not managed for its wild, remote and scenic characteristics, and does not have conservation restrictions. The Magnolia Woods parcel is predominantly a capped landfill converted to athletic fields and is not a DCR or Locally Designated Scenic Landscape. The Massachusetts Important Bird Area Program (IBA), administered by the Mass Audubon and "various partner organizations" identifies Eastern Point/Gloucester Harbor as an important Bird Area. The site is approximately 2.3 miles to the east of the Magnolia Woods wind turbine sites. While the installation of wind turbines at these sites is not expected to have a direct impact on this habitat area, further investigation is recommended in the Feasibility Study phase.

Preliminary review located the nearest State registered historic site as over 1,300 feet from the Magnolia Woods West Site and is not expected to substantially be affected. Gloucester's governance includes a Historic District Commission, and consultation with the Commission is recommended. Numerous sites are listed on the Massachusetts Cultural Resource Information System and are beyond the scope of the Site Assessment.

(10) Interconnection (1 Paragraph). Please provide a brief description of the electrical infrastructure near the site, including the distance to closest transmission or distribution lines and their voltage and capacity, distance to nearest available three-phase power if not on-site, and assumed interconnection points.

Overhead 3-phase power exists to the north, west and south of the athletic fields adjacent to the Sites. In the north, a 4,160 volt line owned by National Grid parallels Western Avenue through this section of town. A service tap from this line is located at the intersection of Western Avenue and the Magnolia Woods Recreation Facility entrance drive where it heads underground. A second 3-phase line runs east-west and south of the playing fields and passes within approximately 600 ft of the West Site and within 200 ft of the East Site. This line connects to the same 4,160 volt distribution line along-side Western Avenue. Ownership or purpose of the second line was not determined in this assessment. National Grid, the local utility, will identify adequacy of the distribution lines for interconnection and communications with them should occur in the Feasibility Study phase.



(11) **Site Access** (1 Paragraph). Please describe how a turbine and its components could be transported to the site from main highways. Maps depicting a potential route could be included.

The major east-west route from Interstate 95 through Cape Ann to Gloucester is State Rte. 128. This four-lane highway is more than 50 years old and several overpasses present low clearances to large loads. Secondary roads, connecting from Rte. 128 to Western Avenue (Rte. 127) were also examined. Most, including Rte 127 from the west or Rte. 133 from the north, were found to have limited horizontal and vertical clearances. One route alternative identified is the Rte 128 Grant traffic circle exit north of the City, south along Washington Street through Gloucester City, then Middle Street to Western Avenue near the waterfront. Heading west out of the City, toward the Magnolia Woods Site, Western Avenue crosses a drawbridge, approximately 75 ft long near the intersection of Rte. 133. From this point the route is approximately 2.5 miles along Western Avenue to the entrance to the Magnolia Woods Recreation Facility. Alternative transportation options could include barging the oversize loads to the State Fish Pier at the City waterfront. From the Pier, loads would then be transported westerly along Main Street eventually merging into the Western Avenue/Washington Street intersection. From this point the route beyond the intersection is the same as described above. Off-site transportation considerations deserve further study by a qualified transportation specialist familiar with transporting wind turbine components.

(12) **Fatal Flaws** (1-3 Paragraph)

Summarize any identified potential project fatal flaws and the management strategies proposed to address them. In addition to any items identified above, address at a minimum:

- transportation/site access potential
- noise
- shadow-flicker
- space for construction (i.e. lay-down area)
- microwave/communications towers or radar facilities

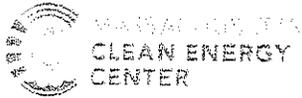
No Fatal Flaws were identified for these Sites. However, further studies to assess the potential impact of sound and shadow flicker are warranted. The nearest large communication tower is identified visually at 1.1 miles distant from the project sites, and no unusual level of interference is expected. Further investigation by a qualified expert is warranted.

Transportation for this site is discussed in #11 above.

(13) **Recommendations** (1 Paragraph)

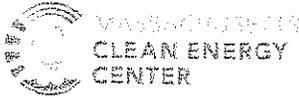
Provide a summary of recommended turbine sizes, if any that merit investigation in a feasibility study.

Megawatt-scale turbines would merit further investigation in a feasibility study. Site-specific wind data collection is recommended, as is early-stage off-site transportation investigation using a qualified transportation specialist. An open dialogue with wind turbine manufacturers will be necessary to assess set-back and transportation considerations they may require.



Form B-2

Feasibility Study Application



Commonwealth Wind Incentive Program: Community Scale

Feasibility Study

Solicitation No. 2011-CWIPCS-01

Application and Budget Instructions and Forms

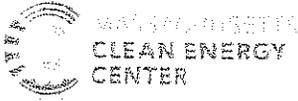
Complete the forms provided in this document by saving this MS Word file (Commonwealth Wind Incentive Program: Community Scale Initiative Application and Budget Forms) under a distinguishing file name. The application narrative must not be more than twelve pages in length (10 pt font), excluding the cover sheet, budget forms and required attachments. It is acceptable to expand the boxes to insert sufficient text in order to supply the requested information. MassCEC's evaluation criteria require complete, clear and concise proposals. It is the sole responsibility of the applicant to ensure that its application is complete, meets minimum threshold requirements and is properly submitted to MassCEC (as detailed in the Solicitation). MassCEC reserves the right to only consider applications that, in its sole judgment, meet the minimum threshold requirements. **NOTE:** Applications must list the name and firm name of the technical consultant who will perform the feasibility study. It is recommended that the technical consultant assist in filling out this application.

The application must contain, at minimum, the following:

- Authorized Applicants Signature and Acceptance Form (Form A of the Solicitation Materials)
- Completed Application Summary Sheet
- Completed Project Highlights Sheet
- Completed Application Narrative
- Completed Budget Form(s)
- Signed General Terms and Conditions, if no exceptions noted (Form C of the Solicitation Materials)
- Required Attachments (see Section 11 for list)

REMINDER:

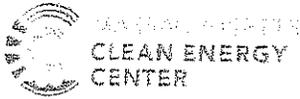
Funds awarded are public funds and any information submitted to MassCEC by the Applicant in response to this grant solicitation is subject to public disclosure requirements as set forth in the Massachusetts Public Records Act. See Section 9.1 of the solicitation for a discussion of Public Disclosure requirements and procedures for handling documents submitted to MassCEC and identified by the Applicant as "sensitive information".



Application Summary Sheet

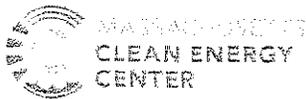
Applicant Information	
Primary Applicant – Organization: City of Gloucester	End User of Electricity Output: City of Gloucester
Applicant legal status and state of jurisdiction: Massachusetts Municipality (City).	Applicant Taxpayer ID#: 04-6001390
Mailing Street Address: 3 Pond Road	City/ Town: Gloucester
State: MA	Zip Code: 01930
<input type="checkbox"/> Check here to confirm that Applicant has thoroughly reviewed Appendix A: Minimum Technical Requirements for Community Scale Projects and meets those requirements.	
<input type="checkbox"/> Check here to confirm that Applicant has thoroughly reviewed Appendix B-1: Feasibility Deliverable Requirements and understands that the proposed study must conform with those stated requirements.	

Project Site Information	
Name of Project Site: Magnolia Woods	
Project Site Type (if a facility exists on the site, highlight appropriate type):	
Public	Commercial
Industrial	Institutional (private)
MUNICIPAL LAND	
Other (please describe) _____	
Site Street Address: 550 Western Ave	City/ Town: Gloucester
State: MA	Zip Code: 01930
Electric Utility Service Provider and Rate Class: National Grid. Rate G-1 or G-3 depending on account	

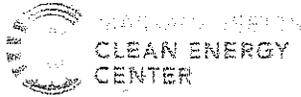


Wind Energy Project Technical Information													
Proposed Wind Project System Power Capacity					Estimated Installation Completion Date of Wind Energy Project:								
1500 kW AC (peak output) per manufacturers specifications					Spring 2012								
Estimated Simple Payback of Wind Project without MassCEC Incentive (years):					Estimated Simple Payback of Wind Project with MassCEC Incentive (years):								
Unit	Rate		Pay back		Unit	Total Cost		Pay back					
Rating	Total Cost Est.	\$/kWh	CF	hrs/yr	Save \$/yr	Rating	Est. w/ Max. Grant	Rate \$/kWh	CF	hrs/yr	Save \$/yr	Pay back yrs	
1500 kW	\$ 4,200,000	\$0.13	0.34	8760	\$ 969,002	5	1500 kW	\$ 3,800,000	0.13	0.34	8760	\$ 937,002	5

Point of Contact Information	
Primary Contact: Authorized to commit organization; notified upon decision of grant award	
Name: Carolyn Kirk	Title: Mayor
Organization: City of Gloucester	Phone: 978.281.9700
Email Address: ckirk@ci.gloucester.ma.us	Fax: 978.281.9738
Mailing Street Address: 9 Dale Avenue	City/ Town: Gloucester
State: MA	Zip +4 Code: 01930
Website: http://gloucester-ma.gov/	
Project Manager: Contact over course of project	
Name: Susan St. Pierre	Title: Project Manager, Clean Energy
Organization: City of Gloucester	Phone: 978.281.9781 access code #7
Email Address: sstpierre@gloucester-ma.gov	Fax: 978.281.9779
Mailing Street Address: 3 Pond Road	City/ Town: Gloucester
State: MA	Zip +4 Code: 01930
Website: http://gloucester-ma.gov/	
Publicity Contact: Listed on MassCEC website for project information requests; contact for publicity efforts	
Name: See Project Manager above	Title:
Organization:	Phone:
Email Address:	Fax:
Mailing Street Address:	City/ Town:
State:	Zip +4 Code:
Website:	



Other Contractors: Contact Information	
Name: Jonathan A. Markey, P.E.	Title: Project Manager
Organization: Meridian Associates, Inc.	Phone: (978) 299-0447 ext: 214
Email Address: jmarkey@meridianassoc.com	Fax: (978) 299-0567
Mailing Street Address: 600 Cummings Center, Suite 5950	City/ Town: Beverly
State: MA	Zip +4 Code: 01915
Website: http://www.meridianassoc.com/	
Name:	Title:
Organization:	Phone:
Email Address:	Fax:
Mailing Street Address:	City/ Town:
State:	Zip +4 Code:
Website:	
Name:	Title:
Organization:	Phone:
Email Address:	Fax:
Mailing Street Address:	City/ Town:
State:	Zip +4 Code:
Website:	
Name:	Title:
Organization:	Phone:
Email Address:	Fax:
Mailing Street Address:	City/ Town:
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Email Address:	Fax:
Mailing Street Address:	City/ Town:
State:	Zip +4 Code:

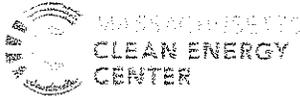


Project Highlights Sheet

Instructions: While some of the following information is also required elsewhere in the application, we require applicants to fully complete this form and attach it as the first page of the application.

Project Title:	<i>Magnolia Woods</i>
Project Address:	<i>550 Western Avenue</i>
Site Coordinates (Specify reference used, e.g. NAD83, etc.):	<i>42° 35' 15" Latitude 70° 42' 10" Longitude</i>
Applicant:	<i>City of Gloucester</i>
Consulting Team:	<i>Meridian Associates, Inc. 500 Cummings Center, Suite 5950 Beverly, MA 01915</i>
MassCEC Funding Requested:	<i>\$85,000</i>
Previous MassCEC/MRET Funding Received (\$ and Name of initiative/Program):	<i>\$50,130 for Feasibility Study for up to 2 MW Wind Turbine at Blackburn Industrial Park \$ Unknown Budget for Wind Resource Site Assessment Report in 2005</i>
Proposed Wind Measurement Equipment:	<i>50m NRG MET Tower w/ sets of redundant anemometers</i>
Proposed Equipment Model and Hub Height:	<i>1.5 MW at 80m hub height</i>
Estimated Average Annual Wind Speed (at hub) in m/s:	<i>7.3 m/s</i>
Average Annual Retail Electricity Usage (kWh) and Peak Electricity Demand (kW) for Project Site:	<i>4,470,355 kWh</i>
Distance to nearest property line:	<i>850 feet</i>
Distance to nearest planned residential property*:	<i>1,215 linear feet</i>

*Note that MassCEC mandates grantees perform a detailed acoustic study if project is within 3.5 times the total blade tip height of the turbine.



Application Narrative

Instructions: Use this form for your application narrative. Applicants should demonstrate that some pre-feasibility work has already been done to assess the opportunity (e.g., project size) and fatal flaws as well as understand technical (including regulatory) and economic issues associated with the project. **Please delete instructions in the completed application narrative that you submit to MassCEC.**

1. Proposed Project Summary (Please keep it concise)													
<table border="1"> <tr> <th colspan="2">Project Title and Location (City and State)</th> </tr> <tr> <td>Organization:</td> <td><i>City of Gloucester</i></td> </tr> <tr> <td>Facility Type:</td> <td><i>Athletic Fields/Closed Landfill</i></td> </tr> <tr> <td>Project Size (kW)::</td> <td><i>1500 kW</i></td> </tr> <tr> <td>Grant Request:</td> <td><i>\$65,000</i></td> </tr> <tr> <td>Primary Contact:</td> <td><i>Susan St. Pierre, sstpierre@gloucester- ma.gov 978.281-9781 access # 7</i></td> </tr> </table>	Project Title and Location (City and State)		Organization:	<i>City of Gloucester</i>	Facility Type:	<i>Athletic Fields/Closed Landfill</i>	Project Size (kW)::	<i>1500 kW</i>	Grant Request:	<i>\$65,000</i>	Primary Contact:	<i>Susan St. Pierre, sstpierre@gloucester- ma.gov 978.281-9781 access # 7</i>	<p>The City of Gloucester wishes to investigate the technical-feasibility of installing a utility-scale wind turbine (approximately 1500 kW) to help offset the community's electric utility demand and increasing utility costs. The site is a former landfill located in a low density area of West Gloucester. The site has very good wind resources estimated by CWEST at 6.8 at 70 meters. Additionally, the site is easily accessed from Western Avenue by a wide, gently sloped paved road and contains large amounts of open areas.</p> <p>The City also requests funding for a 50m MET Tower for wind data analysis and business planning for Acoustical and Flicker analysis.</p>
Project Title and Location (City and State)													
Organization:	<i>City of Gloucester</i>												
Facility Type:	<i>Athletic Fields/Closed Landfill</i>												
Project Size (kW)::	<i>1500 kW</i>												
Grant Request:	<i>\$65,000</i>												
Primary Contact:	<i>Susan St. Pierre, sstpierre@gloucester- ma.gov 978.281-9781 access # 7</i>												
2. Team Commitment and Qualifications (Please keep it concise)													
2.1. Applicant Commitment	<p>The City of Gloucester on Cape Ann wishes to investigate the potential of installing a utility-scale wind turbine (approximately 1500 kW) to help offset electricity demand and rising energy costs and for environmental benefit.</p> <p>The City of Gloucester is fully committed to the Feasibility Study and will pursue a comprehensive evaluation of the data and financial options before proceeding to the design and construction phases of this wind turbine project. The City's intentions are to improve energy efficiency by reducing their energy consumption and by bringing renewable energy production to Gloucester. This project will also lessen electrical expenses for the taxpaying citizens and add an educational component to the Town.</p> <p>Once commissioned, the turbine and its accompanying instrumentation will be able to be used to directly educate the City of Gloucester's residents about wind technology, energy issues and serve as an educational model for the City to demonstrate a responsible approach to energy generation.</p> <p>The City of Gloucester's required economic threshold for this project can be defined by two major goals the first is to help offset electricity demand and rising energy costs and for environmental benefit and the second is that its investments made in a wind turbine installation should have a reasonable simple payback of ten years or less. Given the wind resources of Magnolia Woods, it is anticipated that pursuit of a 1.5 MW or larger turbine will meet both of these major goals.</p>												
2.2. Host/Partner Commitment	<p>The host and site owner are both the City of Gloucester. The City is fully behind this project with strong support from Mayor Carolyn Kirk and the Clean Energy Commission. Also, Senator Bruce Tarr fully supports the project. Please see attached letters of support in Appendix B.</p>												
2.3. Team Description	<p>Ms. Susan St. Pierre, is dedicated staff for the City's Clean Energy goals. She has over 25 years of project management experience in the public and private sector.</p>												



<p>and Qualifications</p>	<p>Mr. Gregg Cademartori has served as the City Planner for six years and successfully shepherded numerous zoning and development proposals through the local permitting process including ordinance related to wind turbines.</p> <p>Both Ms. St. Pierre and Mr. Cademartori are involved in the wind turbine feasibility study being prepared for City-owned land at the Blackburn Industrial Park.</p> <p>Jonathan J. Markey, P.E., Senior Project Manager, Meridian Associates, Inc. of Beverly, MA is a multi-disciplinary planning, engineering, land surveying and landscape architecture firm with a history of helping its clients to "harness the power of wind". From a small residential wind turbine for a single-family home to statewide "house doctor" contracts with the Commonwealth of Massachusetts Department of Capital Asset Management (DCAM), Meridian educates and guides clients to realize the economic and environmental benefits of renewable energy. In its role as prime or sub consultant, Meridian has provided project management services; survey and mapping; site planning and design including construction staging considerations; local, state and federal permitting assistance and other services within our core competencies that may be required to support project requirements. Meridian's internal technical capabilities have been complemented by the expertise of other team members in the areas of wind resource monitoring and analysis, economic analysis, environmental impact analysis, and electrical interconnection among others.</p> <div style="text-align: center;"> <p>Carolyn Kirk Mayor City of Gloucester 781-261-9700</p> <hr/> <p>Susan St. Pierre Project Manager - Clean Energy City of Gloucester 781-261-9700 #7</p> <hr/> <p>Jonathan Markey Project Manager Meridian Associates, Inc. 978-289-0447 x214</p> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;"> <p>Gregg Cademartori City Planner Town of Gloucester</p> </div> </div>
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3. Project Technical Characteristics and Current Status

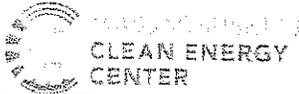
<p>3.1. Site Suitability</p>	<p>The site is a former landfill located in a low density area of West Gloucester. The site has very good wind resources estimated by MassCEC CWEST at 6.8 at 70 meters, which falls above the MassCEC's recommended minimum wind speed of 6.0 m/s at 70m and wind speeds at the proposed site range between 7.0 and 7.5 m/s (15.6 – 16.8 mph) at 70 meters per Massachusetts Geographical Information Systems (MassGIS) Wind Resource Map. Additionally, the site is easily accessed from Western Avenue by a wide, gently sloped paved road and contains large amounts of open areas.</p> <p>The site is an open area of athletic fields that is located approximately 1/2 mile north of Gloucester Harbor at an elevation of around 700 feet. City zoning allows the installation of a wind turbine up to 500' in height at Magnolia Woods and no wetland resource areas are proposed to be altered. There are no Article 97 land restrictions on the site. The site is a closed landfill and any modifications to the cap will require a permit from DEP.</p> <p>Detailed Acoustic Study Requirement: The recently completed MassCEC Site Assessment recommends that an acoustic study be performed as the the nearest residential</p>
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	<p>property is less than a distance of three and one half (3.5) times the blade tip height of the turbine. Funding for this study is proposed under the Business Adder grant amount.</p>														
<p>3.2. Proposed Technology and Projections of Electricity Consumption and Production</p>	<p>The proposed renewable energy system is a single 1500kW three-bladed commercial wind turbine with gearing, a generator and instrumentation needed to implement "net-metering" for the City of Gloucester.</p> <p>Estimated turbine specifications and potential energy production from the wind turbine generator are as follows on the table below.</p> <table border="1" data-bbox="440 520 1328 646"> <thead> <tr> <th>Turbine Faceplate Rating</th> <th>Rotor Diameter</th> <th>Approx. Hub Height</th> <th>Blade Tip Height</th> <th>Annual Energy Output</th> <th>Capacity Factor</th> </tr> </thead> <tbody> <tr> <td>1500kW</td> <td>77m (253')</td> <td>80m (262')</td> <td>119m (389')</td> <td>4,470,355 kWh</td> <td>34.0</td> </tr> </tbody> </table> <p>It is expected that 100% of generated power to be net-metered to the City of Gloucester.</p>	Turbine Faceplate Rating	Rotor Diameter	Approx. Hub Height	Blade Tip Height	Annual Energy Output	Capacity Factor	1500kW	77m (253')	80m (262')	119m (389')	4,470,355 kWh	34.0		
Turbine Faceplate Rating	Rotor Diameter	Approx. Hub Height	Blade Tip Height	Annual Energy Output	Capacity Factor										
1500kW	77m (253')	80m (262')	119m (389')	4,470,355 kWh	34.0										
<p>3.3. Financial Analysis</p>	<p>During the feasibility study, several ownership structures and business models will be evaluated in an effort to meet a 10 year payback criteria. As a minimum, the City of Gloucester ownership and operation, City of Gloucester ownership and third party operation and third party own and operate scenarios will be considered for a go-ahead project.</p> <table border="1" data-bbox="410 884 1333 1041"> <thead> <tr> <th>Turbine Faceplate Rating</th> <th>Total Cost Estimate</th> <th>Rate \$/kWh</th> <th>Capacity Factor</th> <th>hrs/yr</th> <th>Savings (\$/yr)</th> <th>Payback (yrs)</th> </tr> </thead> <tbody> <tr> <td>1500</td> <td>\$ 3,800,000</td> <td>\$0.13</td> <td>0.34</td> <td>8760</td> <td>\$ 937,002</td> <td>5</td> </tr> </tbody> </table> <p>At this time, it is anticipated that the City of Gloucester would own the wind turbine. The City would expect to seek a combination of grants and bonding to finalize design and construct the wind turbine at this location. Alternatively, third party financing may also be considered.</p>	Turbine Faceplate Rating	Total Cost Estimate	Rate \$/kWh	Capacity Factor	hrs/yr	Savings (\$/yr)	Payback (yrs)	1500	\$ 3,800,000	\$0.13	0.34	8760	\$ 937,002	5
Turbine Faceplate Rating	Total Cost Estimate	Rate \$/kWh	Capacity Factor	hrs/yr	Savings (\$/yr)	Payback (yrs)									
1500	\$ 3,800,000	\$0.13	0.34	8760	\$ 937,002	5									
<p>3.4. Project Risks</p>	<p>The greatest project risk is the timely availability of a single WTG within the desired faceplate rating range of 1500kW. Recent global demand has pushed out manufacturers schedules and also discouraged single WTG sales to community-scale installations such as the City of Gloucester Wind Turbine. However, this can be mitigated through broad Request for Proposal submissions and patience. This will also favor thorough design and permitting, site preparation, and complex behind the meter arrangements (e.g., power purchase agreements).</p> <p style="text-align: center;">Risk Matrix for Magnolia Woods Wind Turbine, Gloucester, MA</p> <table border="1" data-bbox="472 1415 1260 1625"> <thead> <tr> <th>Hazard</th> <th>Initial Risk Level</th> <th>Reduction Strategy</th> <th>Residual Risk Level</th> </tr> </thead> <tbody> <tr> <td>1. Site Lease Term</td> <td>L</td> <td>The grantee is the site owner</td> <td>L</td> </tr> </tbody> </table>	Hazard	Initial Risk Level	Reduction Strategy	Residual Risk Level	1. Site Lease Term	L	The grantee is the site owner	L						
Hazard	Initial Risk Level	Reduction Strategy	Residual Risk Level												
1. Site Lease Term	L	The grantee is the site owner	L												



		2. Financing	H	This project will be partially funded by Grant from MCEC Commonwealth Wind incentive Program. The risk is in the timely availability of chosen WTG due to capacity and order queue.	L
		3. Technology	L	Only proven technologies will be utilized and constructed according to code. The unit selected will be designed for its proximity to ocean and have a worldwide install base.	L
		4. Siting and Permitting	M	No major or municipal active airports are located within 5 miles of the site. Wind Energy Conversion Systems are allowed by Special permit by the City of Gloucester. Setbacks standards will be met to the maximum extent possible.	L
		5. Required Easement	L	Direct access from main road.	L
		6. Meter Arrangements	L	The City of Gloucester will work with National Grid. National Grid has past experience with such arrangements.	L
		7. Area Network Issues	L	No microwave paths or other network issues foreseen	L
3.5. Development Progress	<p>The City has done the following to progress the project:</p> <ul style="list-style-type: none"> Created a Clean Energy Commission to investigate the viability of this and other renewable energy projects, among other tasks. Existing zoning ordinance allows wind turbines as accessory use in both residential and industrial districts. The City amended the zoning ordinance on April 28, 2010 to allow wind turbines by special permit as a principle use on city-owned lands. Additionally, private commercial turbines are now allowable by special permit in three residential districts on lots greater than 12.5 acres. Submitted a request to MassCEC for a Site Assessment which was recently 				



	<p>completed.</p> <ul style="list-style-type: none"> Submitted an FAA Notice <p>The list of local authorities for which permits / approvals / determinations will be needed include:</p> <ul style="list-style-type: none"> City Council (Special Permit) FAA and Mass Aeronautic Commission FCC Building Inspector <p>Requests for determinations from US Fish & Wildlife and MA Natural Heritage & Endangered Species Program will be made.</p> <p>No work has been done to acquire an interconnection as this is premature at this stage.</p> <p>Potential timeline to construction is as follows:</p> <ul style="list-style-type: none"> Feasibility Study Final Report fall 2011 Business Planning ongoing through winter 2012 Grant application and hopefully an award for design and construction funds by end of year 2012 Preliminary design and issuance of an RFP spring 2012 <p>Award contract summer 2012</p>
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4. Energy Efficiency Measures

The City of Gloucester created a Clean Energy Commission in 2009 charged with promoting clean energy options in Gloucester including energy efficiency, conservation and the development of clean and renewable energy. The CEC recently completed its benchmarking all municipal facilities and street lights using Portfolio Manager and has used that information as part of the 20% Energy Reduction Plan included in the Green Communities Designation Package application that was submitted to MA DOER on September 3, 2010. This data will be used to target the most cost effective energy upgrade opportunities in each facility and will allow the City to begin a program of implementing such upgrades as budget allows. The City is in the MA Department of Energy Resource's queue for conducting Energy Audits for its municipal facilities to better identify energy efficiency needs and measures. The Gloucester School Department has had two full audits performed by National Grid for the High School and Middle School and has been implementing improvements over the last few years in response to those audits. The CEC is considering whether it should take ownership of sections of the City Street Light system owned by National Grid to enable the City to have control over replacing existing fixtures with energy saving devices.

The City also hired a Clean Energy Project Manager in February of 2010 who has worked with the CEC on renewable energy, energy conservation measures and developing the requirements and strategies necessary to become a state designated Green Community which requires the development of a plan to reduce energy use by 20 percent by FY 2014. The City has developed a vehicle replacement policy with energy efficient vehicles and has held several workshops on the state Stretch Code to educate the communities in the benefits of energy efficiency building measures. The Stretch Code was adopted by the City Council this summer.

5. Project Programmatic Benefits

Currently, there are no private or public wind turbines within a close distance of Gloucester. The closest large wind turbine to Cape Ann in Massachusetts is a privately owned turbine in Newburyport, which is 15 miles away. A wind turbine in Gloucester will also add to the geographical diversity of renewable energy in the Commonwealth. The City of Gloucester is an Economic Target Area. This project is replicable to other "behind the meter" applications in the Commonwealth. The project will also provide economic benefits to the City by reducing energy costs.

6. Scope of Work and Schedule

6.1. Required Deliverables

The City and its consulting team have read, understand and accept MassCEC's Standard Deliverable Requirements outlined in Appendix B-1 Feasibility Study requirements.

6.2. Scope of Work and Schedule

Feasibility		
Task/ Milestone	End Date	Responsible Party
Project Kick Off Meeting	11/01/2010	Project Team
Obtain Building Permit (If applicable)	12/01/2010	Meridian Associates, Inc.
Installation of WME (if applicable)	01/01/2011	Meridian Associates, Inc.
Draft Feasibility Report	02/01/2012	Meridian Associates, Inc.
Final Feasibility Report	04/01/2010	Meridian Associates, Inc.

7. Incentive Calculation

Below are the available incentive levels for Feasibility Study grants. MassCEC strongly encourages applicants to request less than the eligible incentive level.

Feasibility Study Incentive Levels per Project

	Non-Public Entity		Public Entity	
	100-599kW	600kW+	100-599kW	600kW+
Basic	\$20,000	\$40,000	\$30,000	\$50,000
Business Planning Adder	n/a	n/a	n/a	\$15,000
Wind Monitoring Equipment Adder*	\$10,000	\$15,000	\$20,000	\$20,000

* MassCEC may provide limited financial support for a partial year of wind monitoring (see Appendix B-1 for more information).

8. Budget

8.1. Budget Form

The budget should be prepared and included as an attachment using the attached Standard Budget Form. Please follow the associated instructions. Supporting documents, descriptions, and/or worksheets that provide additional budget detail should be attached to the application.

9. Exceptions to the General Terms and Conditions and Task Order Template

Applicant poses no exceptions to the Terms and Conditions



10. Massachusetts Government Entities Only: Demonstrate Compliance with Massachusetts Public Procurement Law	
	The selection of sub-contractors in this application has been and will continue to be in compliance with Massachusetts Public Procurement Law. The public procurement process for selecting Meridian Associates, Inc., to perform the Feasibility Study, will be in compliance with Massachusetts Public Procurement Laws in Chapter 30B. See attached letter from the City of Gloucester's Purchasing Agent.
11. Required Attachments	
11.1. Feasibility Attachments	<p>The following attachments are included in the proposal.</p> <ul style="list-style-type: none"> • Budget Forms (see following page) • Signed General Terms and Conditions (see Attached Form C) • Site Owner Commitment Letter. (see letters from Susan St. Pierre and Mayor Carolyn A. Kirk). • Community Support Letters (See Appendix B) • Other Project Partner Commitment Letter(s) (if applicable). N/A. • Resumes of key team members – previously submitted to MassCEC/MRET) • Electricity bill for load (or estimates for new construction) – See Appendix B • Completed Form B-1: Site Assessment Deliverable Template.
11.2. Optional Attachments	Applicants may attach other documents that would further support the viability of the proposed project, construction contracts and bids, evidence of mitigation of project risks (examples could include an interconnection study, documents indicating progress towards a required easement or power purchase agreement, etc.)

See Solicitation for Application due date and submittal Requirements.



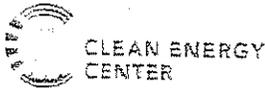
Budget Form

Total Travel	\$ -	\$ -	\$ -	\$ -
IV. Other Direct Costs (list by type)				Total Cost
				\$ -
				\$ -
Total Other Direct Costs	\$ -	\$ -	\$ -	\$ -
Total Cost Summary				
Total Cost by Task	\$ 26,750.00	\$ 53,009.00	\$ 16,000.00	\$ 89,750.00
	Total Project Costs			\$ 89,750.00
	Total MassCEC Grant Request			\$ 85,000.00
	Total Cost Share			\$ 4,750.00
Cost Share as a Percentage of Project Cost				
For Public Entities the Minimum Required is 5%				
For Non-Public Entities the Minimum Required is 20%				5%
MassCEC Grant Request as a Percentage of Project Cost				95%
Cost Sharing				
Source (List name of entity and amount of cost share provided)				Amount
City of Gloucester				\$ 4,750.00
				\$ -
	Total Cost Share			\$ 4,750.00
Cost Share Budget Check				OK

Form C

General Terms and Conditions

Vertical text on the right edge of the page, possibly a page number or reference code.



Form C

General Terms and Conditions

Please Note: Exceptions to the following document must be included in the Application. If Applicant has no exceptions, please submit a fully-executed original of the General Terms and Conditions with the Application.

Massachusetts Clean Energy Center General Terms and Conditions

The following General Terms and Conditions are issued by the Massachusetts Clean Energy Center (MassCEC), an independent public instrumentality of the Commonwealth of Massachusetts. *Any changes or electronic alterations to the official version of this form shall be void.* Participants shall be bound by these General Terms and Conditions upon execution and submission to MassCEC. These General Terms and Conditions will be incorporated by reference into any Task Order for any financial assistance award executed by the Grantee and MassCEC.

1. Definitions

"Agreement" means these General Terms and Conditions and all Task Orders entered into hereunder and all other referenced attachments hereto and thereto, as the same may be amended from time to time in accordance with the terms of these General Terms and Conditions.

"Commonwealth" means the Commonwealth of Massachusetts (and its political subdivisions or agents where the context so requires).

"Deliverable" means any tangible product to be delivered as an element of performance under a Task Order.

"Grant" means the funding awarded by MassCEC's Board of Directors as set forth in the applicable Task Order.

"Grantee" means any Person who has sought funding or other financial support from, or has submitted one or more proposals for projects to, MassCEC and has been awarded such financial support or funding under any of MassCEC's programs or initiatives as in effect from time to time.

"General Counsel" means MassCEC's General Counsel, or, in the event that no Person holds such title at the time in question, such other legal counsel to MassCEC as MassCEC's Executive Director may designate.

"Governmental Authority" means any national or federal government, any state or other political subdivision thereof, and any other Person exercising executive, legislative, judicial, regulatory or administrative functions of or pertaining to government.

"Non-Public Entity" means any entity that is not an instrumentality, authority, agency, department or political subdivision of the Commonwealth of Massachusetts.

"Project" means services rendered, obligations due, costs incurred, commodities and deliverables provided and accepted by the MassCEC, programs provided or other commitments authorized under a Task Order.

"Project Manager" means the individual, set forth in the applicable Task Order, employed by MassCEC and by Grantee, respectively who shall have primary responsibility for managing the Project.

General Terms and Conditions

"Project Budget" means the and costs associated with the tasks set forth in the Project Plan which shall be reimbursed by MassCEC pursuant to the terms and conditions of this Agreement and the applicable Task Order.

"Project Plan" means the set of tasks required to complete the Project as set forth in the applicable Task Order.

"Public Entity" means an instrumentality, authority, agency, department or political subdivision of the Commonwealth of Massachusetts, including municipalities.

"Public Records Act" means the Massachusetts Public Records Act, M.G.L. Chapter 66, and any successor thereto.

"Task Order" means the documentation that sets forth the Grant awarded, the specifics of the Project for which the Grant was awarded and all terms and conditions for the application and use of such Grant funds, including the Project Plan and Budget.

2. Term and Termination

- a) The effective start date of performance under a Task Order shall be the date such Task Order has been executed by an authorized signatory of the Contractor and MassCEC.
- b) This Agreement may be terminated by either MassCEC or Grantee at any time for a material breach of any term of the Agreement. In the event of such termination, compensation shall be paid to the Grantee for the actual costs of allowable expenses incurred for work performed and the reasonable and necessary actual direct costs incurred in the performance of the work pursuant to the applicable Task Order prior to the effective date of the termination.
- c) MassCEC may terminate this Agreement in the event of loss of availability of sufficient funds for the purposes of this Agreement or in the event of an unforeseen public emergency or other change of law mandating immediate MassCEC action inconsistent with performing its obligations under this Agreement.

3. Payments and Compensation

The Grantee shall only be compensated for performance delivered and accepted by the MassCEC in accordance with the specific terms and conditions of the applicable Task Order. Acceptance by the Grantee of any payment or partial payment, without any written objection by the Grantee, shall in each instance operate as a release and discharge of MassCEC from all claims, liabilities or other obligations relating to the performance of a Task Order.

4. Insurance

- a) Specific requirements for insurance shall be set forth in the applicable Task Order.
- b) *Insurance Requirements for Public Agencies.* Notwithstanding the foregoing provision of this Section 4, in the event the Grantee is a public agency (as defined in Chapter 7, Section 39A of the Massachusetts General Laws), then MassCEC agrees that Grantee may self insure to the extent permitted by law as though Grantee were the insurer under all insurance required for its activities under the applicable Task Order. Grantee hereby waives all offsets and defenses that it may otherwise have with respect to the insurance required to be maintained hereunder. The grant of the right to self insure is subject to the requirements that (i) the contractors and subcontractors of Grantee carry insurance of the types and levels required for their activities under the applicable Task Order; (ii) that such insurance shall name MassCEC, and such other entities as MassCEC may request, as additional insureds, and (iii) no settlement or payment, for any claim or loss, injury or damage or other matter as to which MassCEC may be charged with an obligation to make any payment or reimbursement, shall be made by the Grantee without the written approval of MassCEC.

General Terms and Conditions

5. Access and Use

Grantee agrees to license or otherwise make available to MassCEC in perpetuity, without charge, all materials prepared and produced for the Project, including, without limitation, all plans, specifications and analyses developed in connection with the Project for MassCEC's use and dissemination.

6. Publicity

- a) Grantee shall collaborate with MassCEC on any press releases, events, signs and to plan for any news conference concerning the Project. In any media produced by Grantee, Grantee will not represent that positions taken or advanced by it represent the opinion or position of MassCEC.
- b) Grantee agrees that MassCEC shall have the right to make use of and disseminate, in whole or in part, all work products, reports, and other information produced in the course of the Project, and to use the information therein contained to produce summaries, case studies or similar information resources.

7. Assignment and Subcontracting

MassCEC may assign its rights and obligations under this Agreement to any natural or legal person or entity who succeeds to all or any portion of MassCEC's business, and all covenants and agreements hereunder shall inure to the benefit of and be enforceable by said successors or assigns. Grantee shall not assign or in any way transfer any interest in, or any of Grantee's rights or obligations under this Agreement, including by operation of law, without the prior written consent of MassCEC, nor shall Grantee subcontract any services to anyone without the prior written consent of MassCEC.

8. Nondiscrimination

The Grantee agrees to comply with all applicable Federal and State statutes, rules and regulations promoting fair employment practices or prohibiting employment discrimination and unfair labor practices and shall not discriminate in the hiring of any applicant for employment nor shall any qualified employee be demoted, discharged or otherwise subject to discrimination in the tenure, position, promotional opportunities, wages benefits or terms and conditions of their employment because of race, color, national origin, ancestry, age, sex, religion, disability, handicap, sexual orientation, or for exercising any rights afforded by law.

9. Indemnification

- a) To the fullest extent permitted by law, Grantee shall indemnify and hold harmless the Commonwealth, MassCEC, and each of their respective agents, officers, directors and employees (together with the Commonwealth and MassCEC, the "Covered Persons") from and against any and all liability, loss, claims, damages, fines, penalties, costs and expenses (including reasonable attorney's fees), judgments and awards (collectively, "Damages") sustained, incurred or suffered by or imposed upon any Covered Person resulting from (i) any breach of this Agreement or false representation of Grantee under this Agreement, or (ii) any negligent acts or omissions or reckless misconduct of Grantee. Without limiting the foregoing, Grantee shall indemnify and hold harmless each Covered Person against any and all Damages that may arise out of or are imposed because of the failure to comply with the provisions of applicable law by Grantee or any of its agents, officers, directors, employees or subcontractors. The foregoing notwithstanding, Grantee shall not be liable for (i) any Damages sustained, incurred or suffered by or imposed upon any Covered Person resulting from any negligent acts or omissions or reckless misconduct of MassCEC, and (ii) except for liability for death or personal injury caused by the negligence or willful misconduct of the Grantee or for claims of infringement of a third party's intellectual property by Grantee, the aggregate liability of Grantee under this Agreement shall not exceed the greater of the amount of the Grant or the amount recovered under any applicable insurance coverage.

General Terms and Conditions

- b) in no event shall either party be liable for any indirect, incidental, special or consequential damages whatsoever (including but not limited to lost profits or interruption of business) arising out of or related to Grantee's performance of the Project under this Agreement.

10. Public Records

As a public entity, the MassCEC is subject to Massachusetts' Public Records Law, codified at Chapter 66 of the Massachusetts General Laws. Thus, except for those documents exempted from disclosure, any documentary material, data, or other information received by the MassCEC from an Applicant is a public record subject to disclosure. Applicants are advised to review Chapter 66 prior to submitting any information to the MassCEC.

Notwithstanding the above, certain kinds of information may be statutorily exempt from public disclosure under the limited exemption at Chapter 23J, Section 2(k) of the Massachusetts General Laws. Specifically, materials that fall under one of the following categories may be determined to be not public records and thus not subject to disclosure:

1. Information, documents, or data that consist of trade secrets;
2. Information, documents, or data that consist of commercial or financial information regarding the operation of any business conducted by the Applicant; and
3. Information, documents, or data regarding the Applicant's competitive position in a particular field of endeavor.

An Applicant may assert a claim of confidentiality for part or all of the information submitted to the MassCEC. To make a claim of confidentiality, an Applicant must:

1. Clearly identify the documents, reports, or other information you wish to receive confidential treatment and mark such materials "CONFIDENTIAL". Where a portion of an otherwise non-confidential document is alleged to be confidential, the confidential portions should be clearly identified and marked.
2. State the basis for your claim of confidentiality (whether trade secret, commercial or financial information, or competitive position information) and whether disclosure of the information would likely result in substantial harm to your business. If substantial harm would result from disclosure, state what those harmful effects would be and their causal connection to disclosure of the information;
3. State the period of time for which confidential treatment is desired (e.g., until a certain date, until the occurrence of a specific event, or permanently);
4. Submit non-confidential information (including any redacted versions of partially confidential documents) separate from all materials for which you request confidential treatment.

All confidentiality claims are subject to verification by the MassCEC. If no confidentiality claim is made when information is received by the MassCEC, then it may be made publicly available without further notice to you.

11. Audit

At any time period prior to the completion of the Project and as otherwise provided in this Section, MassCEC will have the right to audit Grantee's or its other agents' records to confirm the use of the Grant proceeds. If such audit reveals that any portion of the Grant was utilized for purposes not permitted under the applicable Task Order, then Grantee shall refund to MassCEC the amount

General Terms and Conditions

determined by such audit within thirty (30) days of Grantee's receipt of such audit and demand. Grantee shall maintain books, records, and other compilations of data pertaining to the Grant payments made under an applicable Task Order to the extent and in such detail as shall properly substantiate use of such payments. All such records shall be kept for a period of seven (7) years, starting on the first day after final payment under an applicable Task Order (the "Retention Period"). If any litigation, claim, negotiation, audit or other action involving the records is commenced prior to the expiration of the Retention Period, all records shall be retained until completion of the audit or other action and resolution of all issues resulting therefrom, or until the end of the Retention Period, whichever is later. MassCEC or the Commonwealth or any of their duly authorized representatives shall have the right at reasonable times and upon reasonable notice, to examine and copy at reasonable expense, the books, records, and other compilations of data of the Grantee which pertain to the provisions and requirements of this Grant. Such access may include on-site audits, review and copying of records.

12. Conflict of Interest

Grantee acknowledges that all MassCEC employees are subject to the Massachusetts Conflict of Interest statute, located at Massachusetts General Laws Chapter 268A.

13. Lobbying

No Grant funds may be used to pay for or otherwise support any activities intended to influence any matter pending before the Massachusetts General Court or for activities covered by the law and regulations governing "legislative agents" or "executive agents" set forth in the Massachusetts Lobbying Law, M.G.L. c.3, §39.

14. Choice of Law

This Agreement shall be construed under, and governed by, the laws of the Commonwealth of Massachusetts, without giving effect to its conflict of laws principles. The Grantee agrees to bring any Federal or State legal proceedings arising under this Grant in which the Commonwealth or MassCEC is a party in a court of competent jurisdiction within the Commonwealth of Massachusetts. This Section shall not be construed to limit any other legal rights of the parties.

15. Force Majeure

Neither party shall be liable to the other, or be deemed to be in breach of this Agreement for any failure or delay in rendering performance arising out of causes beyond its reasonable control and without its fault or negligence. Such causes may include, but are not limited to, acts of God or of a public enemy, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, or unusually severe weather. Dates or times of performance including the Term of this Agreement may be extended to account for delays excused by this Section, provided that the party whose performance is affected notifies the other promptly of the existence and nature of such delay.

16. Waivers

Conditions, covenants, duties and obligations contained in this Agreement may be waived only by written agreement between the parties. Forbearance or indulgence in any form or manner by a party shall not be construed as a waiver, nor in any way limit the remedies available to that party.

17. Severability

Each provision of this Agreement shall be treated as a separate and independent clause and any decision from a court of competent jurisdiction to the effect that any clause or provision of this Agreement is null or unenforceable shall in no way impair the validity, power or enforceability of any other clause or provision of this Agreement.

18. Notice

General Terms and Conditions

All communications to MassCEC regarding legal issues shall be mailed or delivered to the following address, or sent by facsimile to the following number:

Massachusetts Clean Energy Center
55 Summer Street, 8th Floor
Boston, MA 02110

Any notice shall be deemed delivered and received when submitted in writing in person or when delivered by any other appropriate method evidencing actual receipt by MassCEC.

19. Amendments, Entire Agreement and Attachments

All conditions, covenants, duties and obligations contained in the Agreement may be amended only through a written amendment signed by the Grantee and MassCEC. The parties understand and agree that this Agreement supersedes all other verbal and written agreements and negotiations by the parties regarding the matters contained herein.

GRANTEE'S AUTHORIZED SIGNATORY: _____



Print Name: Carolyn A. Kirk

(signature)

Title: Mayor

Date: 9/13/10

(Check One): Organization Individual

Full Legal Organization or Individual Name: City of Gloucester MA

Doing Business As Name (if Different): _____

Tax Identification Number: _____

Address: _____

Telephone: _____ FAX: _____

E-Mail Address: _____ URL: _____

Appendix A

Support Letters

City Hall
3 Pond Road
Gloucester, MA 01930



CLEAN ENERGY COMMISSION
CITY OF GLOUCESTER

TEL 978-281-9781 # 7
FAX 978-281-9779
c/o sstpierre@gloucester-
ma.gov

September 13, 2010

Ms. Martha Broad
Massachusetts Clean Energy Center
55 Summer Street 9th Floor
Boston, MA 02110

Re: 2011-CWIPCS-01- City of Gloucester

Dear Ms. Broad,

The Gloucester Clean Energy Commission (CEC) is writing in support of the City of Gloucester's application for grant funding for a Community Wind Feasibility Study for City-owned land called Magnolia Woods in Gloucester, MA.

The CEC was created by the City Council in 2009 to promote clean energy options in Gloucester including energy efficiency, conservation and the development of clean and renewable energy. Committee members, who include individuals representing energy conservation, planning, environmental advocacy and other interests, are dedicated to pursuing the development of renewable energy resources in the City. At its March 23, 2010 meeting, the CEC recommended that the City apply for a feasibility grant for the City-owned Magnolia Woods site. Since the Green Communities Act became law, this site has been frequently identified by private wind-developers as a prime location for a commercial grade turbine project. The site was not evaluated, as were several other Gloucester sites, under the former Community Wind Program by the Mass Technology Collaborative in 2005 because net-metering laws at that time did not support the development of stand-alone turbines located away from what the turbine would supply power to.

We sincerely hope that your agency approves the City of Gloucester's grant application and we hope your agency continues to support our efforts to continue with design and construction of a wind turbine at this and other locations in the City. If you would like to discuss this project further or should you have any questions, please don't hesitate to call me at 617-461-2770 x2013.

Sincerely,

Sam Cleaves

Chairman, Gloucester Clean Energy Commission

Appendix B

Recent Electric Bill

FROM

nationalgrid

GLOUCESTER LANDFILL
472 WESTERN AVE
GLOUCESTER MA 01930

BILLING PERIOD
Jul 13, 2010 to Aug 10, 2010

ACCOUNT NUMBER **PLEASE PAY BY** **AMOUNT DUE**
14285-18004 No payment due \$ 0.00

www.nationalgridus.com

CUSTOMER SERVICE
1-800-322-3223
CREDIT DEPARTMENT
1-888-211-1313
POWER OUTAGE OR DOWNED LINE
1-800-465-1212
EMAIL BILLING INQUIRES
customerservice@us.ngrid.com
CORRESPONDENCE ADDRESS
PO Box 960
Northborough, MA 01532-0960
ELECTRIC PAYMENT ADDRESS
PO Box 1005
Woburn, MA 01807-0960
DATE BILL ISSUED
Aug 13, 2010

ACCOUNT BALANCE

Previous Balance	-902.37
Payment Received	No payments have been received during this billing period - 0.00
Balance Forward	-902.37
Current Charges	+ 10.00
Credit Balance	- \$ 892.37

- **PAYMENT CONCERNS?** We're here to help you. We have several plans that can help you manage your energy bills. Go to www.nationalgridus.com/paymentoptions to find out more or call us at the number on your bill.
- **GO PAPERLESS:** You'll help yourself and the environment by signing up to manage your bills online at www.nationalgridus.com/gopaperless.

DETAIL OF CURRENT CHARGES

Delivery Services

Type of Service	Current Reading	Previous Reading	Difference	Meter Multiplier	Total Usage
Energy	6929 Estimate	6929 Actual	0	1	0 kWh
Total Energy					0 kWh

Demand-KW
8.7 kW

METER NUMBER 04827819 NEXT SCHEDULED READ DATE Sep 13
Billed Demand 8.7 kW

SERVICE PERIOD Jul 13 - Aug 10 NUMBER OF DAYS IN PERIOD 28
RATE General Service - Small C/I G-1 VOLTAGE DELIVERY LEVEL 0 - 2.2 kv

Customer Charge	10.00
Total Delivery Services	\$ 10.00

Enrollment Information
To enroll with a supplier or change to another supplier, you will need the following information about your account:
Loadzone NEMA/BCST
Acct No: 14285-18004 Cycle: 9, GLOU

Electric Usage History

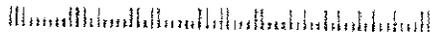
Month	kWh	Month	kWh
Aug 09	00	Mar 10	00
Sep 09	00	Apr 10	00
Oct 09	00	May 10	00
Nov 09	00	Jun 10	00
Dec 09	00	Jul 10	00
Jan 10	00	Aug 10	00
Feb 10	00		

KEEP THIS PORTION FOR YOUR RECORDS
RETURN THIS PORTION WITH YOUR PAYMENT.

nationalgrid

ACCOUNT NUMBER	PLEASE PAY BY	AMOUNT DUE
14285-18004	No Payment Due	\$ 0.00

PO Box 960
Northborough MA 01532



AUTO *SCH 5-DIGIT 01930
GLOUCESTER LANDFILL
9 DALE AVE
GLOUCESTER MA 01930-3005

13977

Please do not mail payment
You have a credit balance on your account.

000001000 14285180047000000000260

Appendix C

Purchasing Department Letter

City Hall
Nine Dale Avenue
Gloucester, MA. 01930



TEL 978 281 9710
FAX 978 281 8763
purchasing@gloucester-ma.gov

CITY OF GLOUCESTER
OFFICE OF THE PURCHASING AGENT
www.gloucester-ma.gov

September 13, 2010

Massachusetts Clean Energy Center
55 Summer Street, 9th Floor
Boston, MA 02110

The City of Gloucester is committed to working with the Massachusetts Procurement Laws. Purchasing Agent, Donna M. Compton, is the Chief Procurement Officer for the City of Gloucester and can verify compliance with state procurement laws. The City of Gloucester retained Meridian Associates, Inc. for the submittal of an application for a feasibility study funding for the Magnolia Woods site from MassCEC and subsequent performance of a study.

Additional information regarding this procurement can be obtained by contacting:

Donna Compton
Purchasing Agent
City of Gloucester
978.281.9710
donnacompton@gloucester-ma.gov

Sincerely,


Donna M. Compton

Task Order 11-01
Between City of Gloucester
And the Massachusetts Clean Energy Technology Center

This Task Order 11-01 dated November 15, 2010 ("Effective Date"); between the **Massachusetts Clean Energy Technology Center** ("MassCEC") and the **City of Gloucester** ("Grantee") incorporates by reference the General Terms and Conditions (the "Agreement") agreed to by Grantee as part of its application for funding. Capitalized terms used and not otherwise defined in this Task Order 11-01 shall have the meanings ascribed to such terms in the General Terms and Conditions. In the event of any conflict between this Task Order 11-01 and the General Terms and Conditions, this Task Order 11-01 shall govern.

Whereas, MassCEC, as administrator of the Renewable Energy Trust Fund (the "Trust"), is offering financial assistance in the form of grants to entities which have submitted a request for funding consistent with the statutory goals set forth in M.G.L. c. 23J, and MassCEC's Strategic Plan;

Whereas, Grantee, a municipality, with a principal place of business at 9 Dale Avenue, Gloucester, MA 01930, has submitted an application for funding the feasibility of installing a wind project at Magnolia Woods (the "Project"); and

Whereas, Grantee is a Public Entity and Project is a Public Entity Wind Project;

Whereas, MassCEC approved the release of funds to Grantee under the Commonwealth Wind: Community Scale Program on October 21, 2010 (the "Grant").

Now therefore, pursuant to the terms and conditions of the Agreement and this Task Order 11-01, MassCEC and Grantee agree as follows:

1. **Term**

The term of this Task Order 11-01 shall commence on November 15, 2010 and shall expire 30 months thereafter.

2. **Performance of the Work**

The Grantee shall perform the work in accordance with the Project Plan in Attachment 1 ("Project Plan") and the Project Budget in Attachment 2 ("Project Budget"). The Grantee is solely responsible for all Project decisions, the preparation of all plans and specifications, and for developing the Project in accordance with the Project Plan.

3. **Project Personnel**

- a) Both MassCEC and Grantee have designated the following Persons to serve as Project Manager to support effective communication between MassCEC and the Grantee and to report on the Project's progress. Each party will endeavor to maintain the continuity of its respective Project personnel.

For MassCEC: Peter McPhee, Project Manager (pmcphee@masscec.com) (617-315-9343)
Heidi Cadavieco, Project Administrator, (hcadavieco@masscec.com) (617-315-9314)

For Grantee: Susan St. Pierre, (sstpierre@gloucester-ma.gov) (978-281-9781 x7)
For invoicing purposes, () ()

- b) Any notice hereunder shall be in writing and shall be sent either (i) by facsimile, (ii) by courier, or (iii) by first class mail, postage, prepaid, addressed to the Project Personnel listed in Section 3(a) at the addresses of such Persons indicated in the preamble of this Task Order 11-01 (or to such other address as a party may provide by notice to the party pursuant to this Section 3(b)), and shall be effective (i) if dispatched by facsimile and delivery is electronically confirmed by said media, the day such electronic confirmation is received, (ii) if sent by courier, one business day after dispatch, (iii) if sent by first class mail, five business days after its date of posting.

4. Deliverables

- a) *Deliverables.* Grantee shall provide the MassCEC Project Manager and Project Administrator with the deliverables set forth in the Project Plan (the "Deliverables") using the outline provided at Attachment 3. Submission of Deliverables by electronic means is preferable.
- b) *Schedule.* The parties acknowledge that the dates listed in the schedule in the Project Plan are estimates and subject to change. Any changes to the schedule must be approved by the MassCEC Project Manager in writing in advance (electronic mail acceptable), and shall be accepted without need for a formal amendment to this Agreement provided that such changes shall not exceed the Term of this Agreement as set forth in Section 1 hereof.

5. Other Requirements

- a) *Program Evaluation.* The Grantee agrees to support MassCEC's program evaluation activities, and its goal to disseminate information regarding Grantee's experiences. To this end, the Grantee agrees that its key personnel and contractors working on the Project will be available at reasonable times with advance notice to be interviewed by MassCEC or its authorized representatives for purposes of program evaluation or case study development.
- b) *Cost Sharing.*
 - i. *Non-Public Entity* - In the event the Grantee is a Non-Public Entity as a condition of the Grant, Grantee shall share the costs for performance of the Project Plan in an amount that is equal to at least twenty (20%) percent of the actual costs incurred (the "Cost Share"). The Cost Share must be in the form of cash only. For purposes of satisfying the Cost Share requirement, Grantee may provide evidence of payments to subcontractors/consultants, direct materials and/or costs and travel. In addition, Grantee may claim direct labor and general and administrative expenses as Cost Share, provided such costs are no greater than five (5%) percent of the total Project costs. The sources and amount of Grantee's Cost Share are set forth in the Project Budget.
 - ii. *Public Entity* - In the event the Grantee is a Public Entity as a condition of the Grant, Grantee shall share the costs for performance of the Project Plan in an amount that is equal to at least five (5%) percent of the actual costs incurred (the "Cost Share"). The Cost Share must be in the form of cash only. For purposes of satisfying the Cost Share requirement, Grantee may provide evidence of payments to subcontractors/consultants, direct materials and/or costs and travel. In addition, Grantee may claim direct labor and general and administrative expenses as Cost Share, provided such costs are no greater than five (5%) percent of the total Project costs. The sources and amount of Grantee's Cost Share are set forth in the Project Budget.
- c) *Project Requirements.* It is Grantee's responsibility to ensure that the Project (i) proceeds in a timely fashion; (ii) adheres to the schedule set forth in the Project Plan and (iii) meets the minimum requirements set forth in Attachment 3. Grantee must complete the Final Feasibility Study within 21 months of the Effective Date set forth in Section 1 if installing a wind monitoring equipment and within 9 months of the Effective Date set forth in Section 1 if not installing wind monitoring equipment. MassCEC will not provide any additional time to complete the Final Feasibility Study.
- d) *Ability to Carry Cash Balance.* It is Grantee's responsibility to be financially prepared to carry the necessary cash balance for the Project during the period between paying the consultant and receiving the MassCEC grant payment. The Grantee agrees to demonstrate upon request that it is able now, and will continue to be able, until the time of receipt of the grant payments from the MassCEC, to carry the necessary cash balance for the costs associated with the Project. If the MassCEC determines, in its sole discretion, that the Grantee is unable to carry the necessary cash balance, the MassCEC may rescind the Grant award.
- e) *Tax Forms.* The Grantee shall provide the MassCEC, upon request, with a properly completed United States Internal Revenue Service Tax Form W-9 (the "W-9"). Failure to provide the W-9

shall be grounds for withholding grant payments until such W-9 is received by the MassCEC Project Manager.

6. **The Grant**

The Grantee shall be compensated on a reimbursement basis for direct costs incurred in the performance of the Project Plan. The foregoing notwithstanding, MassCEC's share of the costs incurred shall not exceed Eighty-Five Thousand Dollars (\$85,000.00). In executing this Task Order, Grantee acknowledges and agrees that its receipt of the Grant does not create any rights of preferences for Grantee to receive subsequent funding from MassCEC for design and/or construction or otherwise.

MassCEC will not provide funding that would, in MassCEC's sole determination, exceed total project costs. Total project costs shall include all costs presented by the Applicant, less all other available incentives, including any state or federal rebates, subsidies, and tax incentives, discounted to present value where necessary. MassCEC will evaluate these situations on a case-by-case basis, and shall reserve the right to reduce any award projected to exceed total project costs by an amount sufficient to prevent the excess.

7. **Payments and Invoices**

The Grantee will follow Generally Accepted Accounting Principles ("GAAP") as well as any applicable accounting standards related to Grantee's receipt of other federal or state funds. If there is not an applicable standard for Grantee, Grantee shall follow Part 31 of the Federal Acquisition Regulations.

a) **Allowable Charges.**

i. **Direct Costs.** The Grantee shall be reimbursed for direct costs incurred in the performance of the Project Plan and as specified on a line item of the Project Budget, as follows:

1. **Direct Labor:** services performed by Grantee's employees under the terms of this Agreement at the actual labor rate per hour for each employee or the rate set forth in the Project Budget, whichever is less;
2. **Subcontractors/Consultants:** services provided by Grantee's subcontractors/consultants, including their travel, at the actual cost paid for Project services which shall not exceed the amount set forth in the Project Budget;
3. **Direct Materials:** the cost of direct materials purchased which shall not exceed the amount set forth in the Project Budget;
4. **Other Direct Costs:** the cost of other direct materials purchased or costs incurred which shall not exceed the amount set forth in the Project Budget. (e.g., postage, telephone, publications, graphics, etc.); and
5. **Travel:** the reasonable and necessary costs incurred for travel, lodging, meals and incidental expenses incurred by Grantee's staff, as set forth in the Project Budget. Reimbursement for the use of personal vehicles shall be limited to the Internal Revenue Service business standard mileage rate.

ii. **Indirect Costs.** The Grantee shall be reimbursed for such indirect costs (e.g., General & Administrative Overhead) at their government-approved rate or at the Grantee's actual indirect cost rate calculated in accordance with Part 31 of the Federal Acquisition Regulations which shall not exceed the rate set forth in the Project Budget. Unless otherwise agreed between the parties, General and Administrative Overhead may be calculated as a percentage of the Direct Labor costs *only*. Therefore, Grantee shall not be reimbursed for any overhead charges or mark-up charges on any consultant/subcontractor invoices, travel expenses, or direct costs, material or other.

b) **Budget Adjustments.** The foregoing notwithstanding, the parties acknowledge that the costs listed in the Project Budget are estimated. Therefore, Grantee may shift funds between the line items associated with each category. Grantee may also shift funds between categories provided that (i) Grantee provides documentation justifying the transfer together with its invoice (see

Section 7(d)(ii)) or as otherwise requested by MassCEC; (ii) the total grant set forth in the Project Budget is not exceeded; (iii) the minimum cost share requirement is met (five (5%) percent for Public Entities and twenty (20%) percent for Non-Public Entities); and (iv) no more than ten (10%) percent of the Grant is affected. The Grantee may not, however, increase the hourly rates as listed in the Project Budget.

c) *Payment Terms.* MassCEC shall pay the Grantee within forty-five (45) days after receipt of a properly documented invoice, unless MassCEC and/or MassCEC should determine that any such payment or any part thereof is otherwise not properly payable pursuant to the terms of this Agreement or the Project Budget.

d) *Invoices/Payment Schedule*

i. The Grant shall be disbursed in the payment schedule as follows:

1. Wind Monitoring Equipment Installation: Upon the installation of the Wind Monitoring Equipment, Grantee shall submit an appropriately documented invoice that (a) details actual costs incurred and (b) requests reimbursement not to exceed the lesser of \$20,000 or actual costs incurred.
2. Final Feasibility Report: Upon MassCEC's receipt and acceptance of the Final Feasibility Report and Final Acoustic Study as set forth in Section 4, Grantee shall submit an appropriately documented invoice that (a) details actual costs incurred and (b) requests reimbursement not to exceed \$50,000 or actual feasibility study costs incurred.
3. Business Planning Tasks: After completion of and reimbursement for the Final Acoustic Study and Final Feasibility Report, if a grant balance remains, grantee may use it for Business Planning tasks. Upon completion of Business Planning tasks and upon MassCEC's receipt and acceptance of the deliverable as set forth in Section 4, Grantee shall submit an appropriately documented invoice that (a) details actual costs incurred and (b) requests reimbursement not to exceed the remaining grant balance. This payment will count as the Project's final payment (the "Final Payment"), and will be paid (a) based on actual costs incurred, and (b) consisting of the total amount payable less all payments previously made to the Grantee.

ii. Invoices shall be addressed to MassCEC's Project Administrator and Project Manager set forth in Section 3(a) above. The invoice shall make reference to the Task Order Number set forth above, set forth total Project costs incurred, and shall identify the individual to be contacted for questions and/or clarification of charges. These shall be broken down into MassCEC's funding share and Grantee's cost-share. They shall be in a format consistent with the cost categories set forth in the Project Budget. Invoices shall provide reasonable documentation to provide evidence of actual costs incurred, including:

1. *Direct Labor:* for each employee, the name, title, and number of hours worked or, if supported by an appropriate allocation method, the percentage of effort expended;
2. *Subcontractors/Consultants:* copies of invoices for such subcontractors/consultants which have been reviewed and approved, in writing, by Grantee prior to submission to MassCEC; and
3. *Direct Costs/Travel:* all direct costs and travel expenses shall be itemized on the invoice and supported by documentation such as vendor invoices, travel vouchers, expense receipts or other documentation as required by MassCEC.

8. Insurance

Grantee shall obtain and maintain in effect through the term of this Task Order 11-01 appropriate insurance coverage for its activities under this Task Order 11-01, including, but not limited to, comprehensive general liability insurance (bodily injury and property damage). At MassCEC's request, Grantee will provide MassCEC with copies of the certificates of insurance evidencing such coverage. Each policy of insurance required by this Task Order 11-01 shall contain a provision endorsed to MassCEC that the insurance provided therein may not be canceled or materially modified (e.g., non-renewed or reduced) without thirty (30) days prior written notice to MassCEC.

Task Order 11-01: City of Gloucester

The Massachusetts Clean Energy Technology Center shall be an additional insured on such policy or policies. The carrying of any of the insurance required hereunder shall not be interpreted as relieving the Grantee of any responsibility to MassCEC. The Grantee shall assist and cooperate with any insurance company in the adjustment or litigation of all claims arising under this Task Order 11-01.

9. Affirmation of Warranties and Certifications

Grantee hereby represents and warrants that, as of the date of this Task Order 11-01, all of the representations, warranties and certifications of Grantee set forth in the General Terms and Conditions are true and correct and Grantee is in compliance with all of Grantee's obligations under the General Terms and Conditions and each other Task Order between MassCEC and Grantee.

10. Amendments, Entire Agreement and Attachments

All conditions, covenants, duties and obligations contained in this Task Order 11-01 may be amended only through a written amendment signed by the Grantee, MassCEC. Except for the General Terms and Conditions and the Program Solicitation incorporated herein by reference, the parties understand and agree that this Task Order 11-01 supersedes all other verbal and written agreements and negotiations by the parties regarding the Project set forth herein. The following are attached and incorporated into this Task Order 11-01:

- i. Attachment 1 – Project Plan, Deliverables and Schedule
- ii. Attachment 2 – Project Budget
- iii. Attachment 3 – Feasibility Study Requirements

11. Counterparts

This Agreement may be executed in two or more counterparts, and by different parties hereto on separate counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument.

In witness whereof, the parties hereto set their hands as a document under seal:

Massachusetts Clean Energy Technology Center

City of Gloucester

By: _____

By: _____

Name: Patrick Cloney

Name: _____

Title: Executive Director

Title: _____

Date: _____

Date: _____

Attachment 1

Project Plan, Deliverables and Schedule

Summary

The City of Gloucester will investigate the technical feasibility of installing a utility-scale wind turbine to help offset the community's electric utility demand and increasing utility costs. The site is a former landfill located in an area of West Gloucester with low population density. The site has relatively strong wind resources at 6.8 m/s at 70 meters. This feasibility study will include wind monitoring, wind resource analysis, financial projections, a permitting plan and both shadow flicker and acoustic studies.

The City also has an educational goal for the turbine and its accompanying instrumentation, which is to be used to directly educate the City of Gloucester's residents about wind technology, energy issues and serve as an educational model for the City to demonstrate a responsible approach to energy generation.

Schedule

Task/ Milestone	Milestone Completed by:
Obtain WME Building Permit	4 Months from the Effective Date
Final Acoustic Study	18 Months from the Effective Date
Draft Feasibility Report	18 Months from the Effective Date
Final Feasibility Report	21 Months from the Effective Date
Business Planning Task	27 Months from the Effective Date

Payments

The Grant shall be disbursed in the payment schedule as follows:

1. Wind Monitoring Equipment Installation: Upon the installation of the Wind Monitoring Equipment, Grantee shall submit an appropriately documented invoice that (a) details actual costs incurred and (b) requests reimbursement not to exceed the lesser of \$20,000 or actual costs incurred.
2. Final Feasibility Report: Upon MassCEC's receipt and acceptance of the Final Feasibility Report and Final Acoustic Study as set forth in Section 4, Grantee shall submit an appropriately documented invoice that (a) details actual costs incurred and (b) requests reimbursement not to exceed \$50,000 or actual feasibility study costs incurred.
3. Business Planning Tasks: After completion of and reimbursement for the Wind Monitoring Equipment installation and Final Feasibility Report, if a grant balance remains, grantee may use it for Business Planning tasks. Upon completion of Business Planning tasks and upon MassCEC's receipt and acceptance of the deliverable as set forth in Section 4, Grantee shall submit an appropriately documented invoice that (a) details actual costs incurred and (b) requests reimbursement not to exceed the remaining grant balance. This payment will count as the Project's final payment (the "Final Payment"), and will be paid (a) based on actual costs incurred, and (b) consisting of the total amount payable less all payments previously made to the Grantee.

Attachment 2

Project Budget

Cost Category	Task 1: WME Installation	Task 2: Feasibility Study	Task 3: Business Planning	Total Cost
I. Subcontractors/Consultants				
<i>Firm, Consultant name, and title</i>	<i>rate/hr</i>	<i>Cost</i>	<i>Cost</i>	<i>Cost</i>
Meridian Associates	120	20,750	53,000	16,000
				\$ 89,750.00
				\$ -
				\$ -
				\$ -
Total Subcontractors/Consultants	\$ 20,750.00	\$ 53,000.00	\$ 16,000.00	\$ 89,750.00
II. Direct Materials (Not Applicable for Feasibility Grants)				
<i>Item</i>				<i>Total Cost</i>
				\$ -
				\$ -
				\$ -
				\$ -
Total Direct Materials	\$ -	\$ -	\$ -	\$ -
III. Travel (Must include purpose and basis on supporting schedule)				
				<i>Total Cost</i>
Total Travel	\$ -	\$ -	\$ -	\$ -
IV. Other Direct Costs (list by type)				
				<i>Total Cost</i>
				\$ -
				\$ -
Total Other Direct Costs	\$ -	\$ -	\$ -	\$ -
Total Cost Summary				
Total Cost by Task	\$ 20,750.00	\$ 53,000.00	\$ 16,000.00	\$ 89,750.00
	Total Project Costs			\$ 89,750.00
	Total Mass CEC Grant Request			\$ 85,000.00
	Total Cost Share			\$ 4,750.00
	Cost Share as a Percentage of Project Cost			
	For Public Entities the Minimum Required is 5%			5%
	For Non-Public Entities the Minimum Required is 20%			
	Mass CEC Grant Request as a Percentage of Project Cost			95%
Cost Sharing				
<i>Source (List name of entity and amount of cost share provided)</i>				<i>Amount</i>
City of Gloucester				\$ 4,750.00
				\$ -
Total Cost Share				\$ 4,750.00

Attachment 3

Feasibility Study Goals, Deliverables and Required Components

The Feasibility Study

A Wind Project feasibility study should provide the potential developer with the necessary information to decide whether to pursue construction of a Wind Project. For example, a complete and thorough feasibility study should recommend a specific turbine size, and provide a realistic budget and schedule for construction. In addition, a complete feasibility study should identify and examine all project uncertainties and potential fatal flaws to a Wind Project, and outline exactly how each of those issues might be managed or overcome.

The feasibility study team should achieve the following goals:

1. Address technical, environmental, regulatory, and financial aspects of the Project.
2. Identify potential wind plant configuration options.
3. Provide a comprehensive evaluation of issues, risks, and uncertainties that may affect the ability to install wind turbine(s) at the project site, i.e. mitigation plan for fatal flaws identified and may identify topics to be investigated further by the grantee, e.g. a more detailed acoustic study.
4. Be completed by deadlines indicated below.
5. Maintain routine communication between the technical team and project proponent.

Business Planning For Public Entities

MassCEC provides additional financial support for Public Entities to perform studies and/or analyses that go beyond the scope of the feasibility study deliverables outlined below. These tasks may include the performance of detailed acoustic studies, pre-design tasks, or additional financial modeling (e.g. evaluation of project financial risks or ownership strategies). Although these tasks are often performed after the feasibility study is complete, public entity grantees may request approval from MassCEC to spend all or a portion of the Business Planning budget prior to or during feasibility (see below).

Prior to the expenditure of the business planning funds, the grantee must submit a description of the tasks to be supported with these funds using Business Planning Request template provided in this Attachment 3. Upon approval by MassCEC, the grantee may begin performing Business Planning tasks.

Acoustic Studies

If the distance between the proposed turbine location(s) and the nearest residential property is less than a distance of three and one half (3.5) times the blade tip height of the turbine, MassCEC will mandate that a detailed acoustic study be completed early during the feasibility study phase. The purpose of a detailed acoustic study is to establish the ambient noise level and model proposed turbine noise to ensure that the Commonwealth's noise standards will be met at adjacent property lines and residences. For Public Entities, MassCEC may earmark a portion of the Business Planning funds for a detailed acoustic study. For Non-Public entities, the study would be required as part of the feasibility study deliverables. For projects where a detailed acoustic study will be required by MassCEC, applicants must identify their acoustic consultant at the time of application.

Table 1. Feasibility and Business Planning Milestone Dates
Note: All dates are in reference to the contract effective date.

Milestone	Public		Non-Public	
	Basic	Wind Monitoring Equipment (WME)	Basic	Wind Monitoring Equipment (WME)
Obtain Building Permit and install the Wind Monitoring Equipment (WME)		4 months		4 months
WME Payment*		after proof of install, receive up to \$20,000		after proof of install, receive up to \$15,000
Draft Report	6 months	18 months	6 months	18 months
Draft Report Payment	After receipt & approval of draft report - 50% of the grant > up to \$15,000 for under 600kW > up to \$25,000 for 600kW and over			
Final Report	9 months	21 months	9 months	21 months
Business Planning for Public Entities (for 600+ kW projects only)	15 months	27 months	N/A	N/A
Final Grant Payment	After receipt & approval of all deliverables - remainder of the grant (minimum 5% grantee cost share)	After receipt & approval of all deliverables - remainder of the grant (minimum 5% grantee cost share)	After receipt & approval of all deliverables - 100% of the grant (minimum 20% grantee cost share)	After receipt & approval of all deliverables - remainder of the grant (minimum 20% grantee cost share)

* Note: At MassCEC's discretion, limited financial support will be considered to support a partial year of wind monitoring using qualified wind monitoring equipment in combination with commercially available virtual MET tower data (see Appendix B-1).

A. WME Installation Deliverable Requirements

Feasibility Study Grantees who elected to install Wind Monitoring Equipment are required demonstrate proof of equipment installation.

Equipment	Acceptable Proof of Installation
Met Tower	Detailed invoice from the met tower installer demonstrating that the system has been installed on site
SODAR or LIDAR	An initial data report demonstrating that the system has been installed on-site and is reporting

B. Feasibility Study Deliverable Requirements

Feasibility Study Grantees are required to complete a feasibility study that includes the following information. For a feasibility study being submitted for a Design & Construction grant, the study must meet the requirements stated below. However, for all feasibility studies that were previously funded through the MTC, MRET, or MassCEC (under LORI, Community Wind Collaborative, etc.), the feasibility study requirements of the associated program at the time will serve as the minimum requirements for the submitted feasibility study if the following requirements are not met.

Component	Tasks
Executive Summary and	

Recommendations	
1. <u>Prepare an executive summary</u>	<ul style="list-style-type: none"> • Summarize the results of the study • Provide a summary of all recommendations, risks, and uncertainties.
Wind Resource	
2. <u>Evaluate the site wind resource</u> as documented by data collected at the site, and available from other sources	<p>Provide a <u>wind resource profile</u> based on one of the following wind data collection methods*:</p> <ol style="list-style-type: none"> (1) 12 months of MET tower data, (2) 12 months of SODAR data, (3) 12 months of LIDAR data, or (4) Commercially available virtual MET tower data, if appropriate <p>For methods (1) – (3), data should be collected within 1 mile of the site according to the requirements outlined in Attachment 1 to this document. For data not collected directly at the turbine site, the data must be horizontally extrapolated according to industry standards. Data from methods (1) – (3) must also be historically adjusted using a long-term data source according to the requirements outlined in Attachment 1 of this document.</p> <p>For the wind resource assessment and energy analysis, MassCEC requires the use of a commercially available software package, such as WindFarmer, Wind Pro, Wind Farm, WAsP, or a comparable package.</p> <p>For the utilized wind data, provide the following information:</p> <p><u>Measurement Site (for methods (1) – (3))</u></p> <ul style="list-style-type: none"> • Background on measurements: <ul style="list-style-type: none"> ○ Measurement period ○ Measurement data recovery and quality ○ Measurement specifications (sensor heights, sensor type, etc.) • Results: <ul style="list-style-type: none"> ○ Average annual wind speed at all measured heights ○ Calculated wind shear, including overview of calculation methodology ○ Measured turbulence intensity at highest height available <p><u>Long-Term Wind Conditions</u></p> <ul style="list-style-type: none"> • What method, if any, was used to estimate the long-term wind conditions? • What long-term reference data was used? From where and for how long? • What are the specifications of this reference data (i.e. sensor height, elevation, location, data quality, etc.)?

	<ul style="list-style-type: none">• Provide detailed information on long-term historical correlation and prediction procedure utilized• Vertical Extrapolation: Estimate average annual wind speed at hub height(s) at project site<ul style="list-style-type: none">◦ Summarize extrapolation methodology, including:<ul style="list-style-type: none">▪ Utilized wind shear▪ Utilized lower level wind speeds (i.e., what data from what height)▪ State the average annual wind speeds at hub height(s)• Horizontal Extrapolation, if necessary (i.e. how do you arrive at project site wind speed from measurement site wind speed?):<ul style="list-style-type: none">◦ What methodology was used to estimate site wind speeds at the project site (WASP, MS-Micro, CFD, etc.)?• What roughness values generally characterize terrain surrounding the project and measurement sites?• Compile a wind resource profile for the turbine location(s), including<ul style="list-style-type: none">◦ Wind rose◦ Diurnal average wind speed profile◦ Seasonal average wind speed profile◦ Frequency distribution of site wind speeds (tabular preferred)◦ Estimated turbulence intensity◦ Estimated wind shear• Identify any obstructions or characteristics at the turbine location(s) and detail their impact on the wind resource at that site• For multi-turbine projects, address issues of interactive resource loss or wake-added turbulence• Characterize the overall viability of the site from a wind resource perspective• Make recommendations regarding additional wind resource monitoring or validation <p>For the project turbine location(s), complete a <u>risk and uncertainty analysis</u> for the predicted annual wind resource:</p> <ul style="list-style-type: none">• Identify sources and values of uncertainty in wind and/or energy production, which could include:<ul style="list-style-type: none">◦ Wind measurement error◦ Long-term correlation error◦ Error in vertical extrapolation◦ Error in horizontal extrapolation◦ Fluctuation of yearly annual wind speeds◦ Uncertainty of shifting average wind speeds due to climate change◦ Any additional uncertainty• Based on identified sources of uncertainty, provide estimate of total uncertainty in average annual wind speed
--	--

	<ul style="list-style-type: none"> • For average annual wind speed, provide estimates at <ul style="list-style-type: none"> ○ P50 (the expected value) and ○ P90 (the low-side estimate expected to be exceeded with 90% probability) • Identify any risks related to the site's wind resource, which could include: <ul style="list-style-type: none"> ○ Excessive site wind shear ○ Excessive site wind turbulence • Other potential risks (including inflow angle, extreme wind conditions, etc.) • If available, provide the average wind speed for the year coincident with the measurement period as well as the long term average
Installation Site and Vicinity	
<p>3. <u>Evaluate installation site physical characteristics</u>, including: topography, land cover, land use, access roads, buildings. This information should also be included in the schematic site plan requested in Section 9.</p>	<ul style="list-style-type: none"> • Provide a general description of site physical characteristics • Describe current and anticipated uses of the site, e.g. recreational, commercial, conservation • Identify and describe infrastructure on or adjacent to the site, e.g. buildings, towers, roads, underground cables and pipes • Evaluate the suitability of potential wind turbine locations from safety and operational viewpoints • Describe the spatial separation of turbine locations from buildings, known property lines (survey not required), and pedestrian or vehicular traffic
<p>4. <u>Evaluate characteristics of the site vicinity</u> including: type and proximity of neighbors, typical activities (recreation, commerce, industry, air traffic), nearby historic or scenic sites</p>	<ul style="list-style-type: none"> • Provide a general description of the site vicinity, inhabitants, land uses within one mile, and typical activities • Identify key visual and noise receptors and characterize the potential level of impact • Identify all operating airports and air navigation facilities within 10 nautical miles of the project site, and any potential airspace restrictions; File for and receive a Determination of No Hazard (DNH) from the Federal Aviation Administration (FAA) • Identify all electronic communications facilities within 3 miles of the project site (radio, microwave, cellular), and any potential electronic interference issues associated with these facilities • Evaluate the ability to deliver wind turbine components and installation equipment to the site from the nearest major highway or port • Identify potential challenges to community acceptance
<p>5. <u>Evaluate installation site electrical infrastructure</u>, including existing transmission and/or distribution system line locations and voltages</p>	<ul style="list-style-type: none"> • Identify potential interconnection locations • Assess the feasibility of interconnecting the wind turbine to the existing electrical infrastructure. Indicate whether 3-phase power is currently available or will be available before project is complete. • Identify the process for interconnection approval • Identify opportunities for use of wind turbine electrical output on site • Characterize the load profile and electric rate structure of on-site facilities

Environmental and Regulatory Review and Permitting Plan	
<p>6. <u>Identify and evaluate environmental concerns</u>, including the likely presence of rare or endangered species and wetlands, through a review of publicly available databases and cursory site inspection.</p>	<ul style="list-style-type: none"> • Provide a description of flora and fauna expected to be found at the Project Site, as well as wetland resources • Identify concerns associated with bird or bat populations in the vicinity of the Project Site • Identify potential negative environmental impacts or environmental permitting challenges, and describe, if applicable, mitigation strategies for these issues
<p>7. <u>Identify and evaluate required reviews, permits and approvals</u>, including federal, state local, and utility interconnection requirements</p>	<p>Provide a Permitting Plan:</p> <ul style="list-style-type: none"> • Identify site zoning designation and any known development restrictions • Identify existing or planned bylaws relating to wind development • Identify and list required permits and approvals • Identify additional research that must be completed prior to filing for permits and approvals • Estimate the required timeframe for securing permits and approvals
Wind Plant Configurations	
<p>8. <u>Prepare a conceptual wind plant configuration</u>, including number, size and location of wind turbines</p>	<ul style="list-style-type: none"> • Identify and describe appropriate candidate wind turbines for the site (e.g. manufacturer, anticipated IEC class, tower height, rotor diameter, generator rating) • Identify recommended "assumed turbine characteristics" for subsequent energy production and financial analyses • Identify up to three potential wind plant configurations and recommend one • Identify potential locations for wind turbines; provide a preliminary recommendation for a specific location for installation of the turbines, ancillary equipment, and electrical interconnection • Describe the spatial separation between potential turbine locations and (a) key on-site facilities (e.g. buildings, high-use areas) and (b) key off-site visual and noise receptors • Determine potential shadow flicker impacts • Determine potential acoustic impacts • Evaluate the overall appropriateness and community impact of the proposed turbine locations • For projects with a nameplate capacity of 600kW or greater, include six or more photosimulations of the turbine(s)
<p>9. Prepare a schematic <u>project site plan</u> with preliminary layout of turbine, components and interconnection point</p>	
Energy Production and Financial Analysis	
<p>10. <u>Estimate wind project energy production</u></p>	<p>Estimate annual energy production of conceptual wind project configuration(s). Include</p>

	<ul style="list-style-type: none"> Information regarding the origin of the utilized power curves (commercially published, certified, measured, etc.) Estimates of production losses and their sources, including any anticipated performance degradation over time For multi-turbine projects, the implications to energy production from wind resource loss and wake-added turbulence An uncertainty analysis at both P50 and P90 exceedance probability levels, including <ul style="list-style-type: none"> Propagation of wind speed uncertainty into energy production uncertainty estimates Additional sources of energy production-related error (power curve, etc.) An estimate of total uncertainty in projected annual energy production
11. <u>Estimate wind project costs</u>	<ul style="list-style-type: none"> Identify assumed capital, reserve, operating, and maintenance costs for up to three wind plant configurations and recommend one configuration
12. <u>Estimate project revenues</u> <i>(Note: MassCEC is not requesting a pro forma analysis that assumes a particular ownership and financing strategy.)</i>	<ul style="list-style-type: none"> Identify the assumed value of RECs sold over life of the project Estimate the potential value of wind-generated electricity Estimate project cash flows (energy, capacity, RECs)
13. Prepare a project <u>financial analysis</u> for each conceptual wind project configuration <i>(Note: The financial analysis may assume alternative ownership and financing strategies.)</i>	<ul style="list-style-type: none"> Identify major assumptions, including sources and amounts of debt and equity, interest rate(s) for debt, debt coverage ratios, hurdle rates for return on equity, applicability of tax credits Estimate the life-cycle cost of energy for each wind project configuration Estimate rates of return for financial participants (e.g. equity investor, site owner), both with and without an assumed a Commonwealth Wind grant Characterize the overall viability of each wind project configuration from a financial perspective; For both the P50 and P90 estimated annual energy production, provide a sensitivity analysis for the recommended wind project configuration that utilizes both a baseline (net-metering or offset) electricity price and a price 20% below the baseline.

C. Business Planning Deliverable Requirements

Component	Details
Perform technical studies and analyses that go beyond the feasibility study deliverable requirements, to support a Public Entity's project development decision making.	<ul style="list-style-type: none"> Perform expanded studies of project acoustics and/or flicker Perform additional project pro forma economic analyses, e.g. evaluation of project financial risks or ownership strategies Develop a procurement strategy Identify a project management and operations strategy

Business Planning Request Template (for Public Entities Only)

Business planning is available for public entities pursuing a wind project of 600 kW capacity or greater. Business planning is defined in Appendix B-1 (Feasibility Deliverable Requirements) as technical studies, analyses, or support outside of the scope of the Feasibility Study with the goal of investigating outstanding project issues or moving the public entity toward the Design stage. Please refer to the Feasibility Deliverable Requirements for further detail.

This template should be filled out when applicant or grantee has developed a detailed plan for the use of business planning funds. This can either be during the feasibility study or after the study is completed. The funds must be expended within six months of the date the final feasibility study is completed. Details regarding the costs of tasks should be provided in the budget spreadsheet and a description of the tasks should be entered below.

Applicant or Grantee Contact and Project Information	
DATE (month/day/year)	
Project Title	
Applicant or Grantee Project Manager Contact Name	
Title	
Organization	
Address Line 1	
Address Line 2	
Telephone	
Email	

<p>Please provide a detailed description of scope of business planning tasks and submit an updated budget if necessary.</p>	
<p>Total Business Planning Budget</p>	

City Hall Annex
Three Pond Road
Gloucester, MA 01930



TEL 978-281-9781
FAX 978-281-9779
sbuck@ci.gloucester.ma.us

CITY OF GLOUCESTER
COMMUNITY DEVELOPMENT DEPARTMENT

MEMORANDUM

TO: Mayor Carolyn Kirk
FROM: Sarah Garcia, Community Development Director *Sarah Garcia*
RE: Grant funding for Wind Turbine Feasibility Study Magnolia Woods Recreational Area
CC: Susan St. Pierre, Project Manager Clean Energy
Gregg Cademartori, City Planner
DATE: January 3, 2011

I am pleased to inform you that the City has been awarded an \$85,000 grant from the Massachusetts Clean Energy Center (MassCEC) to undertake a feasibility study for the installation of up to a 2MW wind turbine on City owned land in the vicinity of the Magnolia Woods Recreational Area. The Community Development staff will be working with the consulting firm of Meridian Associates to develop this study over the next several months. There is a small local match that is being met with the same Clean Energy green-up funds that support our part-time Clean Energy Project Manager.

Please forward our request to accept this grant to the City Council for their consideration.

Please also transmit to City Council, for information only, the City's application for a small research and planning grant from the Massachusetts Bays Program. We have requested \$22,000 for a study of climate change vulnerability from sea-level rise on selected public properties. The Planning Director and IT Department have partnered to provide in-kind (non-financial) support for this study.

Finally, as part of our successful designation as a Green Community, we are eligible for up to \$198,200 in grant funding for energy conservation or energy renewable projects. Our request for the funding is due January 21st. The Clean Energy Commission, in consultation with the school department, has identified a new boiler system at the Beeman School as the top priority. Depending on the final estimated cost of the boiler, the city may be able to apply for additional projects. The CEC is considering an assessment of the solar roof potential at the Beeman School and the High School, as well as considering addressing air leakage at City Hall and possibly an engineering study of a new HVAC system for the building.

Please transmit our request to the City Council to apply for the Green Communities funding.

Thank you.



City of Gloucester
Grant Application and Check List

Granting Authority: State Federal Other

Name of Grant: Massachusetts Green Communities Grant

Department Applying for Grant: Community Development Department

Agency-Federal or State application is requested from: Massachusetts Executive Office of Energy & Environmental Affairs Department of Energy Resources

Object of the application: To secure funding to replace the boiler system at the Beeman Elementary School building.

Any match requirements: No. Maximum Grant Amount is \$198,200.00

Mayor's approval to proceed:  4/5/11
Signature Date

City Council's referral to Budget & Finance Standing Committee: _____
Vote Date

Budget & Finance Standing Committee: _____
Positive or Negative Recommendation Date

City Council's Approval or Rejection: _____
Vote Date

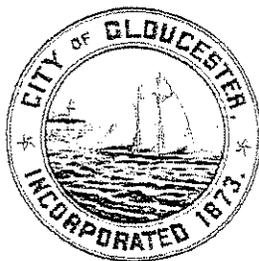
City Clerk's Certification of Vote to City Auditor: _____
Certification Date

City Auditor:
Assignment of account title and value of grant: _____
Title Amount

Auditor's distribution to managing department: _____
Department Date sent

NOTE: A copy of all grant paperwork must be submitted to the Auditor's Office

FORM: AUDIT GRANT CHECKLIST – V.1



City of Gloucester Grant Application and Check List (Continued)

The following are documents needed
by the Auditing Office for grant
account creation:

1. Grant Application
2. Grant Award Letter/Standard Contract Approval Form
3. Council Order Approval
4. Original Grant Account Budget as approved by Grantor
5. Amended Grant Account Budget as approved by Grantor (if applicable)
6. Any additional information as requested by the Auditing Department

Note: All documents must be complete signed copies.

Please attach the following documents with the Grant Application and Check List and send to the Auditors' Office.



COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF
ENERGY AND ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENERGY RESOURCES
100 CAMBRIDGE ST., SUITE 1020
BOSTON, MA 02114
Internet: www.Mass.Gov/DOER
Email: Energy@State.MA.US

Deval L. Patrick
Governor

Timothy P. Murray
Lieutenant Governor

Ian A. Bowles
Secretary, Executive Office of Energy
and Environmental Affairs

Philip Giudice
Commissioner

TELEPHONE
617-626-7300

FACSIMILE
617-727-0030
617-727-0093

December 16, 2010

Mayor Caroln A. Kirk
City of Gloucester
3 Pond Street
Gloucester, MA 01930

Dear Mayor Kirk:

Congratulations on the City of Gloucester's designation as a Green Community! This designation is quite an achievement and reflects the hard work and tireless efforts your community has exhibited in meeting the Green Community Grant Program's five criteria. Having met these criteria, the City of Gloucester is now an energy leader in Massachusetts, poised to reduce its energy costs, improve the local environment and implement energy efficiency and renewable energy projects with funding through the Green Communities Grant Program. *The purpose of this letter is to confirm your Green Communities designation in writing and provide you with program information and activities that you should be aware of.*

Along with this designation the City of Gloucester has been awarded a grant of \$198,200. A formulaic allocation was established due to the number of Green Communities designated and the total amount of grant funds that are available which is \$4,000,000. This formula consisted of a base grant per community of \$125,000, plus an amount adjusted for population/income with an additional \$10,000 for those designated communities that adopted as-of-right

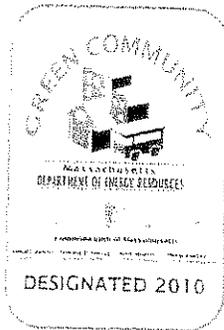
renewable generation. To receive this grant award, the City of Gloucester will be required to submit a project application proposing how these funds will be spent. The Green Communities Division ("Division") will begin accepting grant applications on December 17th and all grant applications must be received by 5pm on January 21, 2011. The Green Communities' Grant application with submission instructions is located [here](#).

SOLAR SOLID WASTE COMPACTORS

In addition to the grant funding, Green Communities will be receiving BigBeily solar solid waste compactors ("compactors"). Your Regional Coordinator, Joanne Bissetta, will be contacting you soon regarding the number you will receive as well as the type of model options available. Your preference regarding the particular model must be provided to your Regional Coordinator no later than 5pm on December 28, 2010.

SIGNS

Each designated Green Community will be receiving four (4) 12" x 18" aluminum signs to be displayed in your community. These signs are in the process of being printed and will be distributed at a future event.



Designated Green Communities that wish to purchase additional signs may do so by contacting any of the following MassCor service representatives listed below. The cost for each additional sign is \$22.94.

Cathleen Ayers
508-850-1072
caavers@doc.state.ma.us

Lynn Gilbode
508-850-1073
imgilbode@doc.state.ma.us

Debbie Correia
508-850-1071
dacorreja@doc.state.ma.us

CERTIFICATES

Each Green Community will also receive an official certificate for display pronouncing the city or town's designation as a Green Community along with the designation date and the Governor, Lt. Governor, Secretary of Energy and Environmental Affairs and the Department of Energy Resources Commissioner's signatures. The certificates are in the process of being printed and will be distributed at a future event.

PRESS EVENTS

We anticipate requests for local public events to announce Green Communities designations and to announce grant awards. It is important that each community coordinate any public event with the Division and we recommend that public events be scheduled once signs, certificates, grant awards and solar compactors have been received. If the City of Gloucester would like to hold a Green Community designation event, we ask that you contact the Green Communities Deputy Director, Meg Lusardi at (617) 626-7364 or by email at meg.lusardi@state.ma.us.

Again, congratulations on becoming a Green Community. The Division looks forward to working with the City of Gloucester to meet the objectives of the Green Communities Grant Program and to support you in meeting your local energy goals. Thank you for your commitment to a greener energy future for Massachusetts.

Sincerely,



Mark D. Sylvia
Director Green Communities Division

Cc: Susan St. Pierre

APPLICATION FORM
MASSACHUSETTS BAYS PROGRAM (MBP) RESEARCH AND PLANNING GRANTS
FY 2011

Request for Responses: ENV 11 CZM 02
Name of Applicant: City of Gloucester, MA

Project Title:
Limited Climate Change Vulnerability Assessment of Public Properties
with a Focus on Predicted Sea Level Rise

Contact Information

Name and Title: Gregg Cademartori, Planning Director
Department: Community Development Department, Planning Division

**APPLICATION FORM
MASSACHUSETTS BAYS PROGRAM (MBP) RESEARCH AND PLANNING GRANTS
FY 2011**

**Request for Responses: ENV 11 CZM 02
Name of Applicant: City of Gloucester, MA**

Contact Information

Name and Title: Gregg Cademartori, Planning Director
Department: Community Development Department, Planning Division
Phone: 978-281-9781 Access #3
Fax: 978-281-9779
Email: gcademartori@gloucester-ma.gov

Address: City Hall Annex
3 Pond Road
Gloucester, MA 01930

Priority Strategic Plan Action Item(s) addressed

This is a *Planning and Capacity Building* project that will apply the recent successful efforts of the Massachusetts Office of Coastal Zone Management Smart Coast Pilot Project in its development of a methodology in Hull (see example visualization below to the right) to help visualize potential impacts of flooding and sea level rise scenarios on coastal development, and implement adaptation strategies (http://www.mass.gov/czm/stormsmart/resources/hull_inundation_report.pdf). This is a necessary first step for communities to advance climate change discussions, as outlined by the researchers from MIT-USGS Science Impact Collaborative which profiled Gloucester in a recent publication "Managing Risk: Helping Cities in Massachusetts Adapt to Climate Change"; excerpt of which is attached (Attachment A).

The City of Gloucester will utilize this methodology along with additional data collection to develop a local climate change vulnerability tool. The City will apply the methodology on a limited number of municipal sites to assess climate change risk associated with predicted sea level rise on critical facilities and assets. City staff will learn how to utilize the tool so that similar assessments on additional properties can be conducted in the future. This analysis may result in, and provide the basis for, the development of open space and resource protection priorities, changes to land use codes, and development design standards for areas of calculated risk.



Figure A-44. Andre M. Scully Senior Center, View 1, Base Flood Elevation plus 3.0 feet of sea level rise.

The Massachusetts Bays Program 2009-2012 Strategic Plan includes many cross-cutting priorities which are in perfect alignment with and will be advanced by this proposed project including:

- Protecting and enhancing coastal habitat*
- Reducing and preventing storm water pollution*
- Managing local land use and growth and*
- Adapting for projected impacts of climate change*

Project Title: Limited Climate Change Vulnerability Assessment of Public Properties with a Focus on Predicted Mean Sea Level Rise

Amount Requested: \$22,500

Match Amount (at least 25 % of TOTAL project cost): \$7,500

Total Project Cost: \$30,000

Project Summary:

Gloucester is a coastal community with over 62 miles of shoreline of various types ranging from gentle sloping saltmarsh-tidal river complexes to rocky shores subject to the brunt of coastal storms off the Atlantic Ocean. Due to this coastal location some areas of the community are already impacted by coastal flooding and many public and private properties and infrastructure facilities will be at risk if even conservative estimates of sea level rise are realized. Furthermore, while lands located in currently identified flood prone areas must meet stringent development standards, there are no standards for lands that may be subject to coastal flooding under potential future conditions.

The purpose of this project is to: develop and utilize a climate change vulnerability assessment tool on selected publicly owned sites in Gloucester. Development of the assessment tool will include collection and inventory of past storm data, baseline information on location and size of buildings and infrastructure, and incorporation of the three dimensional visualization tool developed in Hull under the Office of Coastal Zone Management's Storm Smart Coasts Project. The grant funding will be used to develop and apply the tool on a select number of sites; to facilitate public discussion of current and future risks associated with flooding and predicted sea level rise due to climate change; and to help guide the development of adaptation strategies. Such strategies may include setting open space and resource priorities, examine land use codes, and/or design standards.

1) The Problem:

There are recognized challenges in predicting annual inundation due to coastal storm events even before sea level rise scenarios are considered. If sea level rise predictions follow conservative estimates, or if sea level rises at an accelerated rate, both coastal storms and even regular tidal inundation may impact public and private property alike. At the local level communities have limited understanding of potential impacts of sea level rise. Adding to the complexity of the problem is the low resolution of existing topographic data sets. Most communities have large scale infrastructure projects and facilities upgrades in the pre-planning stages and it is important to better understand the potential risk posed by sea level rise to determine if there are cost effective measures that be incorporated in design to limit such risks and future cost resulting from risk damage. Additionally, the region is well known for its diversity of high quality estuarine environments, which may be impacted by climate change. Further analysis of these critical areas may provide the basis for steps that can be taken to protect and enhance such assets. The project is timed to take advantage of the expected release of LIDAR (Light Detection and Ranging) elevation to be collected in Gloucester in the late spring/early summer of 2011.

2) Goals:

1. To develop a better understanding of potential local climate change risk due to projected sea level rise.
2. To promote and focus public discussion on potential actions to limit risk to estuarine environments, infrastructure, and public and private property.
3. To develop the capacity and tools to replicate such analyses in other coastal areas beyond the limited number of sites included in this study. As part of this grant, city staff will learn how to use the assessment tool and will be responsible for developing scenarios for at least one additional site. This tool will be used to help define open space priorities for coastal habitat protection, and provide a basis for potential changes in land use policy and development design standards.

3) Approach and Tasks:

1. Identify public facilities to be evaluated. Between five and seven sites will be selected for analysis. (Critical infrastructure locations have already been identified in the city's draft Hazard Mitigation Plan prepared with the assistance of MAPC - visit <http://www.gloucester-ma.gov/DocumentView.aspx?DID=381>).
2. Identify and catalogue existing data sources on the condition, location and elevation of buildings and infrastructure on the selected sites and identify data gaps.
3. Interview and catalogue reliable data on past storms and extreme sea level conditions through citizen outreach (such as requests for photographs of known structures and landmarks from storm events). This will help ground discussion of existing or known flooding impacts.
4. Perform ground survey of existing facilities and/or infrastructure with inadequate elevation data for analysis.
5. Develop a local three-dimensional elevation model incorporating detailed buildings and infrastructure data per Hull pilot project methodology.
6. Perform limited vulnerability assessment of study areas by running 3-D simulations of multiple sea level rise predictions per Hull pilot project methodology.
7. Present finding to public officials and facilitate public discussions on potential needs to develop priorities in the broad categories of resource/open space protection, and/or land use codes and design standards for public and private development to limit risk for future development and redevelopment and infrastructure investment in high risk areas.

Scope and timeline

General oversight of this project will be provided by the Planning Division working cooperatively with the Department of Public Works and the GIS Department.

Direct supervision of consultants for this project shall be provided by the Planning Division.

Tasks to be completed from February 15 to May 15, 2010.

Development of outreach strategy to collect storm related data including criteria for validating sources.
Draft and issue RFR for consultant services for survey and 3-D model development of city facilities.
Evaluate responses, interview selected candidates, select and engage consultant(s).
Purchase needed software and upgrades including Google Sketch Up Pro and ESRI ArcMap Spatial Analyst Extension from approved vendors.
Conduct public outreach effort to collect storm data in the study area.

Tasks to be conducted from May 15th to October 15, 2010

Depending on the availability of LIDAR data, consultants will develop 3-D sea level rise scenarios for the community as a whole,

Selected scenarios will be exported for utilization in Google 3-D visualization.

City staff will learn how to use the assessment tool and apply the methodology to a selected site to demonstrate transfer of tools for planning purposes and evaluation of other areas in the community. In the future the tool can also be utilized to evaluate development proposals in at risk locations.

A Report will be developed of the impact of the various scenarios on selected city facilities.

It is recognized that this will require and extension of the suggested June 30, 2011 contract term. However this is due to the uncertainty in the availability of the LIDAR data.

4) Transfer and Benefits.

The benefit of the development of this limited climate change vulnerability assessment tool is that it may be used to assess other areas in the community, including development scenarios. The entire north shore coast of Massachusetts is scheduled to be flown in the spring of 2011, with data to be available shortly thereafter. It was also intention of CZM in development of the inundation methodology, to be used in exactly such a study as proposed, expanding the knowledge base for Gloucester and coastal communities as a whole. Staff will be responsible for demonstrating the ability to develop additional site scenarios.

5) Qualifications of Project Team

Qualifications for consultants on this project will include experience with the development of 3-D models, licensed surveyors with experience in coastal communities in Massachusetts, experience interpreting FEMA maps and if possible experience with providing documentation for FEMA letter of map amendment process. The City of Gloucester has an in-house GIS specialist and graphics capabilities. The Planning Director has direct experience with the use of LIDAR data.

6) Project Budget:

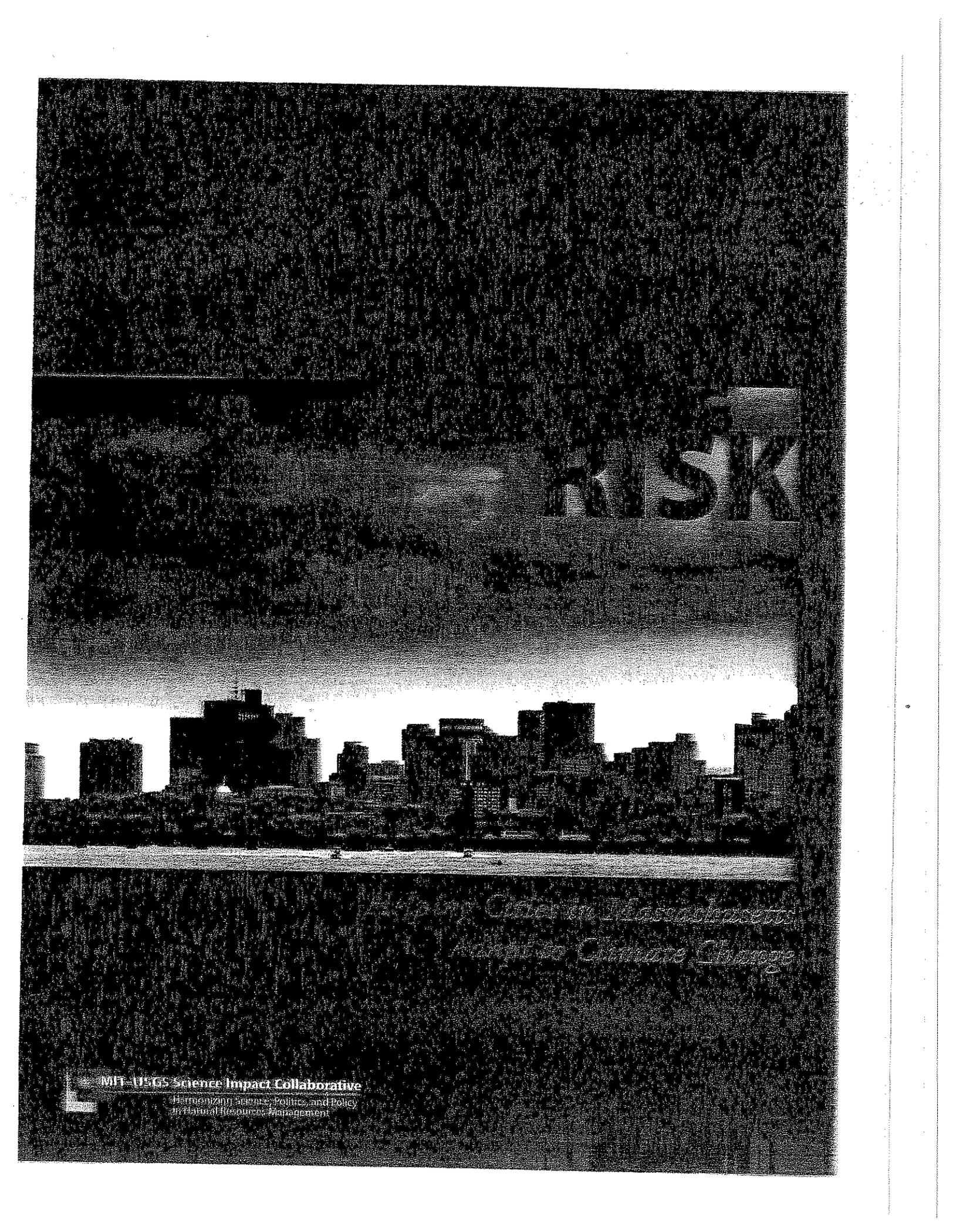
Task Description	Responsible	GRANT \$	MATCH \$	Delivery Date
ESRI Spatial Analyst Purchase	IT/GIS Department	\$2,500		March 15, 2011
Facilities Survey	Consultant/Staff	\$3,000	\$1,000	April 15, 2011
Storm Data Outreach/Collection/Integration	Planning Division/GIS		\$2,500	April 15, 2011
Photography for 3-D facility modeling	Consultant/Staff	\$1,500	\$500	April 15, 2011
Google Sketchup Pro Purchase	IT Department	\$500		April 15, 2011
Facility Models/Training	Consultant	\$8,000		June 1, 2011
Development of Inundation Scenarios, Visualizations, Report Development	Consultant	\$6,500		As LIDAR is available Summer 2011
Development of Additional Site-specific scenarios	Staff		\$3,500	As LIDAR is available Summer 2011
Presentation	Consultant/Staff	\$500		Fall 2011
Sub-Total		\$22,000	\$7,500	
Total				\$30,000

Budget estimates are based on rough understanding of Hull project budget. Match is based on in kind cost of staff time. Staff time is divided between 3-D sketch-up of one or more facilities, ground survey, modeling scenarios for selected site, project coordination and presentation of results. Staff time is approximated at 150 hours with a combined rate of \$50/hour.

7) Supporting Materials

- a) Supporting materials include authorization letter from the Mayor of Gloucester in support of the pursuit of this grant application and project (Attachment B).
- b) Currently there are no other funding requests associated with this proposed project.
- c) The support letter of the Mayor of Gloucester includes acknowledgement of staff time and outreach that will be provided as 25% local match. Time will be divided between Planning, GIS, Community Development and Department of Public Works/Engineering staff (Attachment B).
- d) Also attached are support letters from the Chair of the Planning Board, and the Chair of the Conservation Commission (Attachment C).

ATTACHMENT A



MSK

*Case Studies
on Climate Change*

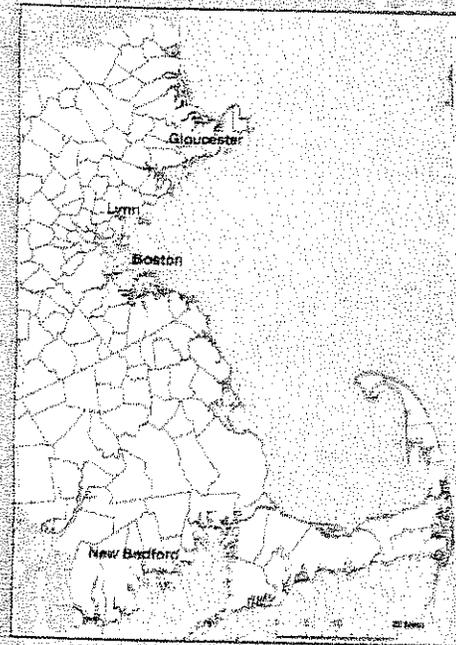
MIT-USGS Science Impact Collaborative
Harmonizing Science, Politics, and Policy
in Natural Resource Management

IN THIS DOCUMENT, we feature reports prepared by interns at the Massachusetts Institute of Technology (MIT) as part of the Massachusetts Climate Change Adaptation Project. Some students are part of the MIT-USGS Science Impact Collaborative (MUSIC). Their work is linked to the new Science, Decisions, and Policy Program of the US Geological Survey which emphasizes ecosystem services, adaptive management, resilience, vulnerability and risk, along with the science of science policy. These students are trained to help groups with conflicting views have productive conversations. Ultimately, our goal is to enable governmental, corporate and civil society groups to engage in collaborative environmental management.

Lawrence Susskind

Ford Professor of Urban and Environmental Planning at MIT

Director of the Massachusetts Climate Change Adaptation Project



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_____ is a master's degree candidate in the MIT Department of Urban Studies and Planning. A graduate of the University of Missouri, he worked for several years at AmericaSpeaks facilitating large-scale public dialogues.

_____ is an undergraduate in Biology and Urban Studies and Planning at MIT. She has studied international development in Ecuador and Paraguay.

_____ is pursuing a double major in Civil & Environmental Engineering and Operations Research at MIT. She is active in the undergraduate sustainability organization.

_____ will graduate from MIT this year with a Bachelors of Science in Art and Design. She has written an award-winning research paper about the history of New York City's subway maps.

_____ is an undergraduate at Wellesley College majoring in Economics. She hopes to attend graduate school in Urban Planning.

Gloucester: A Vulnerable City with Many Assets for Building Resilience

By Tyler Corson-Rikert

CASE STUDY 12

OVERVIEW OF GLOUCESTER AND CLIMATE CHANGE

Gloucester is a coastal Massachusetts city and famous fishing port on an island 25 miles northeast of Boston. Sixty-two miles of coastline are within city limits. Commercial fishing, a \$54 million industry, remains a pillar of Gloucester's economy, along with tourism and maritime businesses. The city faces serious challenges in striving to develop a 21st century economy and upgrade critical infrastructures in the midst of the national recession. But, it is home to many progressive citizens who want to insure the city's future in light of such concerns as climate change.¹⁰⁰

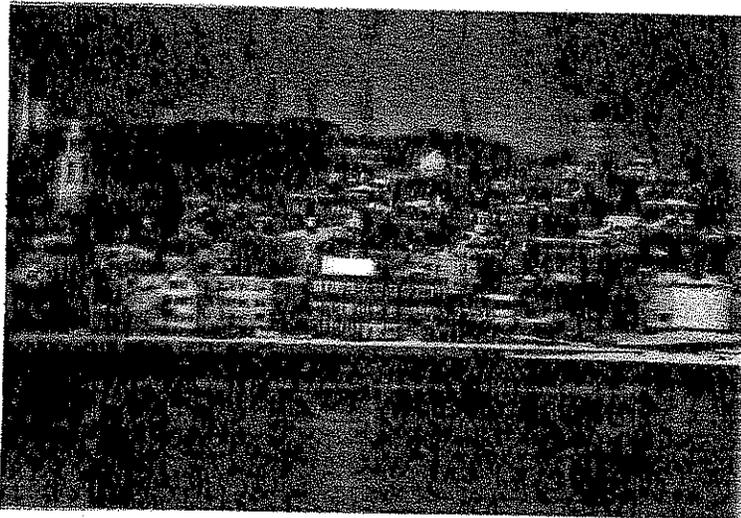


Photo: Steven Erik, "Gloucester, Massachusetts" January 2, 2006 via Flickr, Creative Commons Attribution.

Gloucester currently has few policies or initiatives that directly confront climate-change risks. However, the city has incorporated an active group of citizens into a formal Clean Energy Commission and is undertaking flood mapping updates, natural hazard mitigation planning, and disaster response planning—efforts that will lay the foundation for any future initiatives to increase the city's resiliency in a changing climate.

GLOUCESTER'S VULNERABILITIES TO CLIMATE CHANGE

Gloucester faces many climate change risks, though its coastal location makes rising sea levels and storms the most prominent threats. Other potential impacts identified by city and state officials include storm water flooding, erosion, heat waves, vector-borne diseases, and harm to the local economy.

Sea-Level Rise

Although no study has been done of Gloucester's vulnerabilities to sea-level rise and storm surge flooding, the significance of these risks is clear given the city's 62-mile coastline. A lot of Gloucester's infrastructure, buildings, and businesses are right on the waterfront, including a state Designated Port Area. However, the land rises quickly as you move inland. In West Gloucester there are more low areas, but few residential properties are on the water. Moreover, coastal properties tend to be more expensive, and few low-income residents live along the shore. Therefore, coastal property owners are often more able to afford repairs after damage. However, there is no question that if sea level rose by feet rather than inches the economic

Gloucester currently has few policies or initiatives that directly confront climate change risks.

and social impacts on Gloucester would be significant. Of particular concern are the plans for rebuilding the sewage treatment plant. Although citizens have insisted at public meetings that the new facility be designed to withstand climate change, there are no plans to relocate the facility from its current location.¹⁰¹ The causeways that provide access to the city are also clear sources of vulnerability. At times, when high winds and tides have aligned, waves have surged over roads and damaged them—such as during a 1991 storm.¹⁰²

The Federal Emergency Management Agency (FEMA) and the Massachusetts Department of Conservation and Recreation (DCR) are currently working with Gloucester to update Flood Insurance Rate Maps identifying current 100-year flood zones.¹⁰³ That modeling and mapping will be completed in the summer of 2010 and inform a second effort, planned in conjunction with FEMA and the Metropolitan Area Planning Council, to devise a natural hazard mitigation plan.¹⁰⁴ These two efforts are focused on current hazards, but nevertheless offer insight into the vulnerabilities presented by flooding due to sea-level rise and storm surge.

Storm Water

In addition to ocean flooding, inadequate storm water infrastructure could cause flooding outside of mapped flood zones. Flooding from storm water runoff has occurred in the past in the Maplewood Avenue residential and commercial area and at Poplar Park. During the 2006 Mother's Day Storm, a flooding stream wiped out the access road to the elderly housing development in Poplar Park, and the basements of many homes in Gloucester flooded. Old dams that could potentially fail during flood events are an additional threat to residents and property.¹⁰⁵

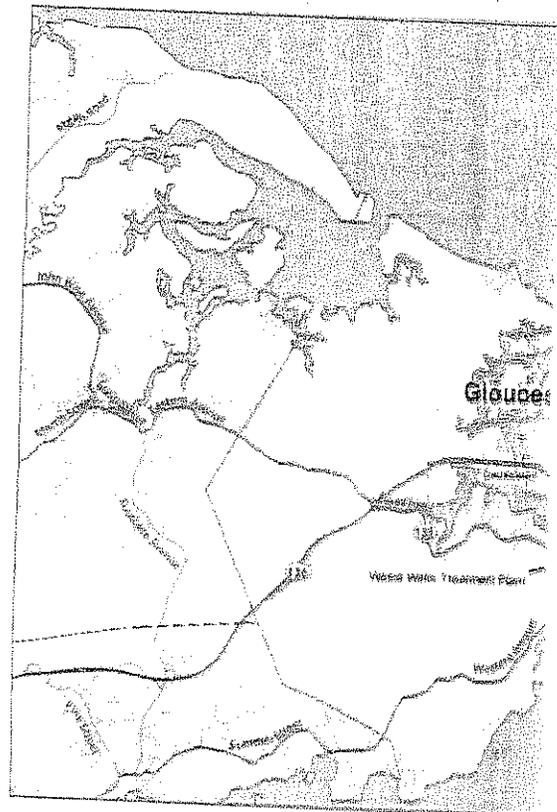
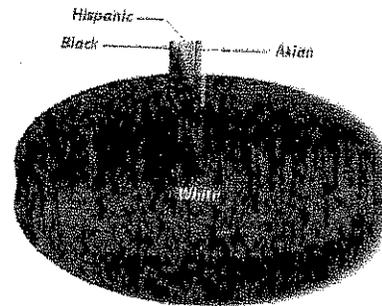
The more intense storms expected from climate change would certainly stress the city's water supply and storm water infrastructure. For 20 days in August 2009, Gloucester residents had to boil their water because of high levels of coliform in the city's aging water supply system, an event that, while not attributable to climate change, highlights the system's vulnerability. In Mayor Carolyn Kirk's words,

We believe that heavy rains in June contributed to causing a bloom of algae in the water supply and then during a heat wave in August the water quality deteriorated so much that the plant could not keep up and there was a failure. We had a boil water order for 20 days. Whether or not that was climate change I do not know, but deteriorated infrastructure definitely contributed. Any stresses on the infrastructure by nature cause great problems.¹⁰⁶

The city is working now under consent orders from the Massachusetts Department of Environmental Protection (DEP) and the US Environmental Protection Agency to upgrade its water and sewage treatment plants and resolve combined sewer overflow issues in its storm water system.

2006	
2006 Population	30,564
Percentage change 2000 to 2006	+ 1%
2000	
Percentage foreign born	5%
Percentage with high school diplomas	86%
Percentage with bachelor's degrees	28%
1999	
Median household income	\$47,722
Percentage living below the poverty line	9%

Source: "State & County QuickFacts: Gloucester, Massachusetts," US Census Bureau, quickfacts.census.gov/qfd/states/25/2526150.html.



The more intense storms expected from climate change would certainly stress the city's water supply and storm water infrastructure.

Gloucester's citizen-initiated effort to reduce greenhouse gas emissions provides a possible model for engaging city stakeholders in the related issue of climate adaptation.

Public Health

Health department officials have identified several risks from climate change, including increases in mosquito- and tick-borne diseases like West Nile and Lyme disease, heat waves, and storm impacts on physical and mental health. Gloucester currently has high rates of tick-borne Lyme disease but the area's saltwater mosquitoes are immune to vector-borne diseases such as West Nile.¹⁰⁷ Public Health Director Jack Vondras has expressed concern that climate change could cause Lyme disease to worsen, and that area mosquitoes might become susceptible to West Nile. If climate change brings more rainfall and marshes stay wet longer, then mosquito-borne diseases would likely become more prevalent.

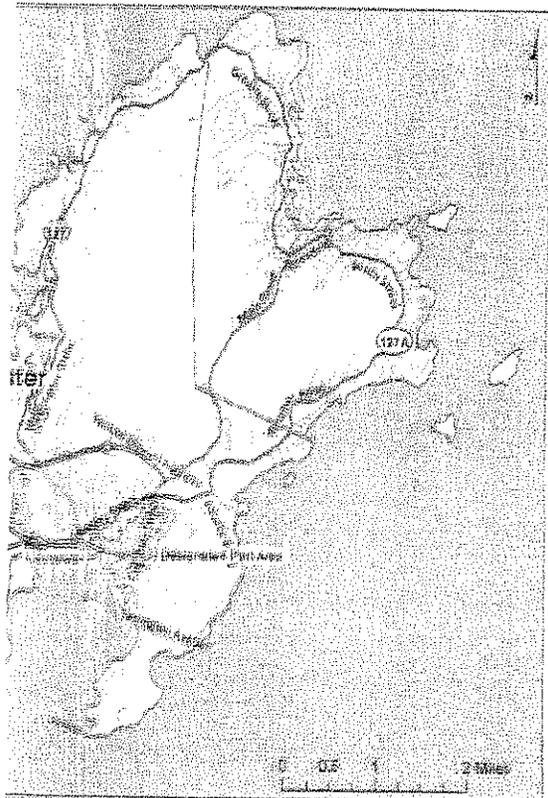
Economy

Mayor Kirk and other city officials have expressed concerns about the potential for climate change to damage Gloucester's fishing, maritime, and tourism industries.¹⁰⁸ Tourism is very important to the city's economy, with jobs in food service, hotels, and visitor attractions making up 11 percent of total employment. The city's attraction lies in its natural environment, Gloucester's distinctive harbor and marine industries, and the area's rich history. Municipal beaches, which sea-level rise and storm activity could erode, bring in over a million dollars in revenue each year.¹⁰⁹ Many visitors come to observe the working waterfront and fishing industry, which could also be threatened by changing climate and sea-level rise. The fishing industry is already very vulnerable due to environmental changes and government regulation; therefore, climate-induced biological changes in the ocean could prove catastrophic. Moreover, fishing and other maritime industries rely on waterfront infrastructure that sea-level rise could threaten. On a positive note, a consultant to the city's Community Development Department recently highlighted the possibility that climate change-produced storm activity and coastal erosion might increase demand for the construction and engineering services of Gloucester's maritime industries to protect property along the Atlantic coast.¹¹⁰

CLIMATE CHANGE MITIGATION EFFORTS IN GLOUCESTER

Gloucester's citizen-initiated effort to reduce greenhouse gas emissions provides a possible model for engaging city stakeholders in the related issue of climate adaptation. Around 2002 a small group "interested in grassroots activities to bring people together and raise awareness around energy issues" formed the Cape Ann Energy Network.¹¹¹ The group worked to connect city residents to state clean energy programs, organized an energy fair, and held a series of workshops, increasing awareness of energy and climate change issues in the community.¹¹²

In August 2009, the Gloucester City Council formally incorporated a Clean Energy Commission to "promote clean energy options in Gloucester, including energy efficiency, conservation, and the development of clean and renewable energy."¹¹³ Its specific directives include developing strategies to reduce the city's energy costs, tracking state and federal mandates and grant programs, providing guidance to



city staff and the public, and identifying "climate adaptation and mitigation issues and strategies to safeguard the long-term economic and cultural vitality of the city."¹¹⁴ Mayor Kirk appointed a number of the Cape Ann Energy Network's leaders to the commission.¹¹⁵ According to Kirk, "Originally anything around energy was a task force that had no standing. My administration researched best practices and looked at progressive cities where committees had been established by ordinance, giving them influence and stature in an advisory role to the City Council."¹¹⁶ Since its founding, the commission has focused primarily on helping the city apply for stimulus money and become a certified Green Community under the Massachusetts Department of Energy Resources Green Communities Program.¹¹⁷

CLIMATE ADAPTATION EFFORTS IN GLOUCESTER

Overview

The city of Gloucester is currently doing little explicitly to increase its resilience to climate change, but it has multiple efforts under way that provide a strong foundation for taking on climate-change risks in the future. An emergency response planning team is preparing the city to effectively handle a wide range of situations, including storms, flooding, heat waves, and epidemics of the sort climate change might produce. It is also working with FEMA, the state DCR, and the Metropolitan Area Planning Council to map current flood risks and plan for the mitigation of natural hazards. Finally, the city is in the midst of making massive, state- and federally mandated investments to upgrade its water supply, waste treatment, and storm water infrastructure.

Emergency Response

The Gloucester Health Department participates actively in city and regional emergency response planning for health crises and natural disasters that might occur in the near term, but would also likely worsen and become more frequent in a warming climate. The department is working alongside the police, Fire Department, Coast Guard, hospitals, day cares, school systems, and other entities to plan and drill how to respond to incidents ranging from terrorism to heat waves to blizzards. The team plans a major drill in spring 2010 modeled on an ice storm and have discussed simulating a hurricane in the future.¹¹⁸

The Gloucester Public Health Department has also received funding from the Centers for Disease Control and Prevention through the Massachusetts Department of Public Health to help coordinate regional emergency responses to a wide range of hazards through the North Shore-Cape Ann Emergency Preparedness Coalition.¹¹⁹ The 15 communities involved (including Lynn) work together on best practices and mutual aid agreements.¹²⁰ Such emergency planning clearly increases Gloucester's capacity to respond to natural disasters and infectious diseases that might arise due to climate change. Yet that planning is not intended to look more than a few years ahead. Vondras of the Gloucester Public Health Department said that his department does not sit down and think specifically about the long-term, severe risks expected from climate change; there is a limit to what they have time

GREEN ENERGY COMMISSION MEMBER JILL SUZUKAWA

"First our Energy Commission is quite new—less than a year old. We haven't addressed climate adaptation at this point because we feel it's important first to address the more obvious and politically easier issue of reducing the city's carbon footprint. There's money to be obtained for that and more to be saved as a result so it's a much easier sell. Once we gain traction and momentum in that area we hope to address the issue of adaptation more directly. But this is a town that is financially very strained. The focus is on keeping bus services and schools functioning, so to start an asking the city to create an adaptation plan would not likely lead to success. Hopefully, in a year or two, but not at start-out."¹²¹

The city of Gloucester is currently doing little explicitly to increase its resilience to climate change, but it has multiple efforts under way that provide a strong foundation for taking on climate-change risks in the future.



to do. While they have devoted more and more resources to emergency planning in recent years, the department must still carry out its traditional duties, including inspecting restaurants and dealing with infectious disease outbreaks such as the H1N1 flu pandemic.¹²²

Coastal and River Flooding

The Gloucester Community Development Department is currently coordinating with the Massachusetts DCR and FEMA to update area Flood Insurance Rate Maps. The maps depict the likely extent of the 100-year flood, a flood that has a 1 percent chance of occurring in any given year. This is the measure used to set flood insurance rates. FEMA produces the maps through careful modeling of hydrology and storm surge interactions with topography. Draft maps are available on the Community Development Department's website; final versions will be released in April 2010 and are expected to be adopted in July 2010 after review by local officials and a public comment period.¹²³ The new maps will be a great resource to the city of Gloucester both for land use and natural hazard mitigation planning.

However, the maps are intended to show current, not future conditions, according to Richard Zingarelli, whose Office of Flood Hazard Management at the DCR is contracted by FEMA to provide technical assistance to Massachusetts communities and facilitate information flow between the mapping effort and local governments and citizens. "There are no projections of effects of climate change on those maps," Zingarelli said. Nevertheless, the FEMA maps can be used in conjunction with climate change forecasts that predict how often today's 100-year storm may occur under a future climate system. It is important to understand, though, that such estimates would be quite rough because the projected sea-level rise cannot simply be added onto current maps. An accurate understanding of post-sea-level-rise flooding would require new modeling to understand the complex interactions of storm surge, waves, and topography.¹²⁴

Natural Hazard Mitigation Planning

The city of Gloucester is also working with the Metropolitan Area Planning Council (MAPC) to develop a natural hazard mitigation plan so that it can apply for further FEMA funding. This effort is related to the emergency response planning in the breadth of entities consulted and the range of hazards considered, but focuses instead on actions that can increase resiliency before events occur. Joan Blaustein of the MAPC is developing the plan for Gloucester, meeting with planning, public works, and water and sewer officials to gather information on critical infrastructure, emergency shelters, schools, nursing homes, and substations—any facility that would be part of an emergency response or is particularly vulnerable. Hazards considered include natural flooding, dam failures, earthquakes, high winds, brush fires, and landslides. The goal is to understand where events have occurred or could occur, their causes, and what the city could do to reduce its vulnerability. According to Blaustein, what follows is an

Effort at goal setting and objectives, and then the heart of the plan, what



FEMA is looking for, is potential mitigation efforts. What is the solution for this particular area, the flooding here? ... Generally what [the MAPC] has found is that although most coastal communities are aware of the potential for additional flooding, they are so busy trying to just play catch-up with existing needs that they don't tend to be that focused on "We'd better plan for this 30 to 40 years down the road."¹²⁵

Although these natural hazard mitigation plans do not address climate change and sea-level rise, the process of developing the plans, identifying specific hazard mitigation actions, and applying to FEMA for funding will greatly enhance the city of Gloucester's knowledge about the community's vulnerabilities and ways to increase resiliency.

Infrastructure

Much of Gloucester's older critical infrastructure is in poor condition, having been neglected for 25 to 30 years while the City, in response to court-ordered clean-water mandates, invested in extensive sewer systems in outlying areas. The city's water treatment, distribution, and storage systems need large investments to meet current standards. The city is under a consent order from the Massachusetts Department of Environmental Protection requiring it to upgrade its water system. It is receiving help from the DEP and seeking further state and federal aid for the expected \$50 million to \$60 million project. The city is also under a federal consent order requiring it to separate sewer water from storm water (excess storm water causes sewage to overflow into the river or Gloucester Harbor), a \$60 million project, and the sewer plant needs \$13 million to \$15 million of work. According to Mayor Kirk, "the city is investing in areas where it has absolutely no choice based on urgent priorities and regulators' demands. In my perspective, those are the priorities—especially the water system—not climate change."¹²⁶ In upgrading its infrastructure, the city of Gloucester is working to just meet current standards, not go above and beyond to utilize state-of-the-art technologies or incorporate climate adaptation considerations into the system. As Kirk said,

To some extent our hands are tied. When the waste treatment plant was built the technology was already 20 years behind current innovations. ... Sometimes regulators won't let us go to the most progressive solutions because the rest of the system won't accommodate them; the ripple effects become unmanageable. If we could start all over again, we would. We're barely up to current standards, let alone the state of the art.¹²⁷

Clearly, the city has little financial leeway to add costs to these infrastructure upgrades, but it might be possible to take climate change risks into account when planning expensive investments that the community will count on far into the future.

ESSEX COUNTY GREENBELT ASSOCIATION'S CLIMATE ADAPTATION WORK

The city of Gloucester benefits from the long-term vision and land conservation work of the Essex County Greenbelt Association (ECGA). This local land trust is focused on protecting land for its ecological, agricultural, and scenic quality, with a particular emphasis on preserving landscape corridors or greenbelts between different natural areas. These assets are critical for resilient ecosystems. According to the EC GA executive director, Edward Richter,

We are just beginning to think about how to respond to climate change. We are reading the literature and starting to participate in discussions around adaptation. This has involved our long-term mission on preserving corridors so that species have the ability to migrate in response to changing climate conditions. We are starting to write about climate change, educate ourselves and educate our membership. We are looking at how we should be more resilient to climate change in what we are working on in our planning, both in land acquisition and stewardship—how we manage our properties.

The EC GA benefits from its relationship with the Marine Biological Laboratory of Woods Hole, which leases land from the EC GA for the Plum Island Ecosystems Long-Term Ecological Research site.¹²⁸ The laboratory researches the effects of sea level rise on animals and species, particularly the



presence of invasive species whose spread may be influenced by climate change. The UCGA has not conducted primary research itself, but has benefited with interest findings such as the ability of marsh plants to accrete sediment to build up and keep pace with rising sea levels. The UCGA has a long standing interest in protecting uplands through adjacent to marshes for wildlife which may have a side benefit of preserving space for the eventual migration of wetland communities as sea levels rise. Despite the regulatory protection of wetlands, the UCGA has made acquiring marshes and adjacent buffer areas a priority. The UCGA does not advocate for land use changes at the local level, focusing instead on its core mission to protect marshes wherever they occur. Becker says that UCGA recognizes that land use regulations will make the most clear of any difference. Land acquisition will always have a smaller impact. It has always been the case that the real effect on the landscape is the planning and zoning regulations. Becker participated this year in a session at the Nature Conservancy's roundtable in conjunction with the state Climate Change Adaptation Advisory Committee on enhancing the resilience of natural communities to climate change. The UCGA is interested in the committee's recommendations in light of how they may influence land acquisition as well as the acquisition, education and land raising efforts.

CHALLENGES AND POSSIBLE STRATEGIES FOR CLIMATE ADAPTATION IN GLOUCESTER

The climate-related efforts under way in Gloucester provide a strong foundation, but developing an integrated climate adaptation strategy will still be a great challenge for the city. The general financial climate and the mandated infrastructure investments greatly constrain Gloucester's efforts. City officials understand many of the risks that climate change poses to the city, but it is difficult for them to take on new initiatives. Mayor Kirk said she welcomes the state climate adaptation planning effort, as long as its recommendations do not turn into unfunded mandates for Gloucester.¹³⁰

Integrating Climate Adaptation into Decision Making

One way to increase Gloucester's resilience to climate change would be for relevant city departments to consider climate change risks in their routine decision making. According to Kirk, current city ordinances and infrastructure planning do not take climate change into account. The challenge, as the mayor pointed out, is that such evaluation requires that staff be knowledgeable about climate change hazards and the effects of their decisions on the community's vulnerability. While the city has consultants who could provide such information for infrastructure projects, in other areas staff would require training.¹³¹ For example, currently the state offers little guidance on what should and should not be built in flood plains.

According to Community Development Director Sarah Garcia, city regulatory systems could take climate change risks into account if there were clearly stated guidelines for expected climate change. Climate change impacts could be considered locally in special permits or conservation permitting, statewide through the Building Code, or federally via the FEMA flood maps. The new Flood Insurance Rate Maps that FEMA is creating will affect policy in that they determine the Conservation Commission's jurisdiction for reviewing projects, but these maps have not included any predicted expected sea level rise. The city also requires a lowlands special permit, issued by the city council, for construction of buildings on sites below 10 feet above sea level or on floodplains. Garcia said,

City regulatory systems could take climate change risks into account if there were clearly stated guidelines for expected climate change.

We don't have a lot of formal waterfront planning that takes into account climate change. It would be helpful to us if there were accepted guidelines on expected sea level rise on which we could base our planning. We could then take a 50 year view, adapting our plans and regulations in ways that would not be immediately threatening to any individual or the community.¹³²

In a developed city like Gloucester, long-term planning analysis of existing buildings and infrastructure will develop the resilience the community needs to smoothly adapt to the climate change challenge.¹³³



Better Data

One obstacle to better regulation of development in flood-prone areas is the lack of detailed, up-to-date mapping and projections. Planning Director Gregg Cademartori participated in a coastal zone subgroup meeting of the state Climate Change Adaptation Advisory Committee, and he said that much of the discussion centered on what amount of sea-level rise to plan for. The new 100-year flood maps to be released by FEMA in 2010 will help define current risks in Gloucester, but not future effects of sea-level rise and storm surges interacting with the topography. The city has some datasets from the Massachusetts Office of Coastal Zone Management, which partnered with NOAA to obtain LIDAR (light detection and ranging) topography survey, which is a good start to modeling sea level rise impacts. As Samuel Cleaves of the Clean Energy Commission said, "If you want to create a bylaw or ordinance about building along the coast with sea level-rise in mind, then you need to know where to draw the line in the sand."¹³⁴ The Community Development Department already has some LIDAR data, however it is costly to obtain, and may only be expanded by a state initiative.¹³⁵ However, the topography survey would still leave open the question of what sea-level rise projection to use for policy making.

Engaging Stakeholders

Another key question for Gloucester is how to involve community stakeholders and the public in any effort to adapt to climate change. The city currently engages with the public on relevant issues only through meetings held to present natural-hazard mitigation plans, through public hearings before the release of the new FEMA flood maps, and occasionally at public hearings on proposed waterfront developments. In Blaustein's experience the natural hazard meetings are not well-attended because the plans "are not on people's radar screens ... there's not anything immediate happening." She said that if Gloucester decides to take on climate adaptation she would definitely recommend a stakeholder process. This process would need to be much bigger than the current natural-hazard planning program, which has limited funding and just aims to create a specific plan, not a strategy for the whole community.¹³⁶ Similarly, the public hearings around new FEMA flood maps focus only on technical or highly localized issues, as Zingarelli of the Massachusetts Office of Flood Hazard Management explained:

The sort of information that is being solicited as part of [the public hearings] is very specific to the technical aspects of the maps and how they were developed [These formal appeal and public comment periods] will not provide a whole lot of information toward how the community would use the data and what sort of outreach is needed to go through that process. One thing I would say is that any kind of changes in zoning or land use would need fairly extensive outreach at the local community level ... town meetings, local information meetings, and so forth ... where you're soliciting from the residents of the community their views on how this all should occur.¹³⁷

"Any kind of changes in zoning or land use would need fairly extensive outreach at the local community level ... town meetings, local information meetings, and so forth ... where you're soliciting from the residents of the community their views on how this all should occur."



Current natural hazard mitigation activities, infrastructure upgrades, planning regulations, and emergency preparedness work are beginning to address many of the city's vulnerabilities.

Community Development Director Garcia said she believes that many Gloucester officials and citizens would be interested in engaging in discussions about how to make the community more resilient to climate change.¹³⁸ The city has many knowledgeable citizens, many officials whose work relates to climate change issues, and clear vulnerability to rising sea levels and other impacts. The Clean Energy Commission's work on reducing greenhouse gas emissions certainly highlights the potential for productive citizen involvement in decisions over how best to advance the city's interests related to climate change.

A community effort around adaptation could also advance Garcia's goal of promoting Gloucester as a center for climate change-related research.¹³⁹ The city is home to research efforts in fields such as fisheries management, marine biology and biotechnology, marine technology, and aquaculture, and is working to attract marine renewable energy research in such areas as wave, tidal, and offshore wind technology development.¹⁴⁰

CONCLUSION

Gloucester is a coastal community with great vulnerability to climate change, particularly from coastal and storm water flooding, heat waves and vector-borne diseases, and disruption of the local economy. Through the work of the Community Development Department and the Clean Energy Commission, the city has begun to take the mitigation side of climate change seriously. Gloucester has not yet taken explicit action to increase its resiliency to the effects of climate change, but current natural hazard mitigation activities, infrastructure upgrades, planning regulations, and emergency preparedness work are beginning to address many of the city's vulnerabilities. Significant financial, institutional, and data obstacles remain, but there are citizens and leaders in Gloucester who understand climate change risks and will have much to contribute to securing the city's future as the climate changes.

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122. Vondras, interview.
123. "Flood Mapping Update." City of Gloucester, Mass. www.ci.gloucester.ma.us/index.php?module=page&master&PAGE_use=opview_page&PAGE_id=527.
124. Zingarelli, interview.
125. Blaustein, Joan. Interview by Tyler Corson-Riker. Telephone, November 20, 2009.
126. Kirk, interview.
127. Kirk, interview.
128. "Plum Island Ecosystems Long-Term Ecological Research." Plum Island Ecosystems Long-Term Ecological Research, ecosystems.mbl.edu/PPE/default.htm.
129. Becker, Edward. Interview by Tyler Corson-Riker. Telephone, November 20, 2009.
130. Kirk, interview.
131. Kirk, interview.
132. Garcia and Cademartori, interview.
133. Garcia and Cademartori, interview.
134. Claves, interview.
135. Garcia and Cademartori, interview.
136. Blaustein, interview.
137. Zingarelli, interview.
138. Garcia and Cademartori, interview.
139. Garcia and Cademartori, interview.
140. Gloucester's Maritime Economy: Opportunities and Challenges. Mt. Auburn Associates, October 2009. www.gloucester-ma.gov/localpages/comdev/maritimedisussionpaper.pdf.



ATTACHMENT B

Christine Pantano

From: Carolyn Kirk [ckirk@gloucester-ma.gov]
Sent: Tuesday, January 04, 2011 3:24 PM
To: 'Chris Pantano'
Subject: FW: FY2009 Emergency Management Performance Grant

Hi Chris,
Can you put this in this week's Mayor's Report?
Thank you.
Mayor Kirk

From: Miles Schlichte [mailto:mschlichte@gloucester-ma.gov]
Sent: Tuesday, January 04, 2011 12:13 PM
To: 'Carolyn Kirk'
Cc: 'MilesSchlichte'
Subject: FY2009 Emergency Management Performance Grant

Mayor Kirk,

The City's investment of \$10,000.00 in Emergency Management has already paid for itself. We have received an award letter from MEMA (attached) informing us that due to the City's investment, the City is eligible for \$11,000.00 in matching Emergency Management funds. I have confirmed with MEMA that the Emergency Management Director (EMD) stipend is acceptable to MEMA as meeting \$10,000 worth of the matching obligation and the other \$1,000.00 can be met with an in-kind contribution from allowable sources. In effect, the City needs not put up any additional funding to receive the \$11,000.00. The \$11,000 cannot be used to reimburse the City for the EMD stipend or any additional salary costs for the EMD.

The \$11,000.00 grant will be used to meet the following approved emergency management program goals and objectives as set by MEMA's grant criteria.

- | | |
|--|---|
| 1. Comprehensive Emergency Management Plan:
<i>Emergency Management Plan</i> | <i>Updating of the City's outdated Community</i> |
| 2. Volunteerism and Community Outreach:
<i>Response Team (CERT)</i> | <i>Continued expansion of the Community Emergency</i> |
| 3. Multi-Disciplinary Coordination:
<i>Operations Center (EOC)</i> | <i>Creation and Improvement of the City Emergency</i> |
| 4. Emergency Planning and Community Right to Know (EPCRA):
<i>regional emergency management planning process. (CAEPT)</i> | <i>Continued involvement in the</i> |

As I understand that all grant awards must be approved by the City Council I am respectfully requesting that you please place this item in the Mayor's Report at the first available opportunity.

Thank you.

Deputy Fire Chief Miles Schlichte
MSEM, CEM-MA, CFO, CHS-IV
Gloucester Emergency Management Director
FEMA-MATF1 Safety Officer
(978) 836-8016 cell

1/4/2011



THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF PUBLIC SAFETY AND SECURITY



MASSACHUSETTS EMERGENCY MANAGEMENT AGENCY

400 Worcester Road, Framingham, MA 01702-5399

Tel: 508-820-2000 Fax: 508-820-2030

Website: www.mass.gov/mema

Deval L. Patrick
Governor

Timothy P. Murray
Lieutenant Governor

Mary Elizabeth Heffernan
Secretary

Kurt N. Schwartz
Acting Director

December 1, 2010

Deputy Chief Miles Schlichte
Emergency Management Director
Fire Department
8 School Street
Gloucester, MA 01930

RE: FFY2009 Emergency Management Performance Grant

Dear Deputy Chief Schlichte:

It is my pleasure to inform you that your community emergency management program is eligible to receive a total of \$ 11000.00 in Emergency Management Performance Grant (EMPG) funds. While the EMPG program requires that your community provide a 100% match (a dollar for dollar match) for all grant funds that you expend, you may satisfy the match requirement with "in-kind" expenditures from allowable sources. The EMPG funds must be expended by September 30, 2011.

In an effort to support the formation and development of regional initiatives, individual communities may choose to surrender some or all of their EMPG allotment in favor of participation in a regional project or program. Regional projects may include but are not limited to: regional shelters, regional emergency operations centers, interoperable communications systems, regional planning, and regional emergency management oversight and leadership. Regional programs will need to affiliate with a single community point of contact to serve as the fiscal agent.

This grant opportunity will be structured as a reimbursement grant. This means that you will be required to expend the funds, or at least issue a purchase order for the expenditure, and then seek reimbursement from MEMA. Our intention is to provide you maximum discretion in the use of these grant funds. Accordingly, we will reimburse you upon receipt of appropriate documentation establishing that the funds were used for any expense deemed allowable under guidelines issued by FEMA for the EMPG program. Be advised that funding is contingent upon the completion of an EMPG budget and program narrative for your program. The MEMA Project Management Office staff must approve your proposed budget and program narrative prior to expenditure of funds.

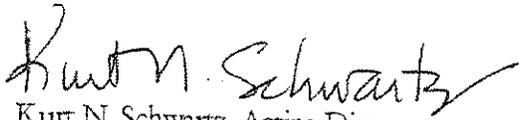
Region I
P.O. Box 116
365 East Street
Tewksbury, MA 01876
Tel: 978-328-1500 Fax: 978-851-8218

Region II
P.O. Box 54
12-I Rear Administration Road
Bridgewater, MA 02324-0054
Tel: 508-427-0400 Fax: 508-697-8869

Region III / IV
1002 Suffield Street
Agawam, MA 01001
Tel: 413-821-1500 Fax: 413-821-1599

The enclosed "FFY 2009 EMPG - GRANT GUIDANCE AND INSTRUCTIONS" document contains detailed information regarding the grant application and administration process. You will be notified of technical assistance meetings being scheduled in each region in the next few weeks. Please refer any question you may have about this grant program to the PMO by contacting Jeff Trask at Jeffrey.Trask@state.ma.us 508-820-2053 or Elaine Denniston at Elaine.Denniston@state.ma.us 508-820-1447. Your regional MEMA office is also available to answer questions and help you complete the necessary contract documents.

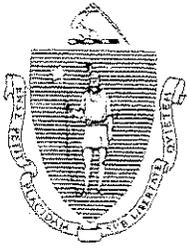
Sincerely,



Kurt N. Schwartz, Acting Director
Massachusetts Emergency Management Agency

CC: Chief Municipal Officer

Enclosures



Massachusetts Department of Elementary and Secondary Education

75 Pleasant Street, Malden, Massachusetts 02148-4906

Telephone: (781) 338-3000
TTY: N.E.T. Relay 1-800-435-2370

December 7, 2010

Joseph Connelly, Superintendent
Gloucester Public School District
6 School House Road
Gloucester, MA 01930

RECEIVED

DEC 14 2010

Mayor's Office

Dear Superintendent Connelly:

As I am sure you are aware, we have not received your 2009-2010 End of Year Financial Report. The report was due on September 30. While you may have been granted an extension, that extension has since expired. These reports are used for numerous purposes such as state aid calculations and determining compliance with State and Federal programs including the ARRA. Their timely submission is critical in accomplishing these tasks. Consequently, if your completed report is not electronically submitted to us by Monday December 20, 2010, we will be withholding 50% of your scheduled December Chapter 70 distribution as well as your December Circuit Breaker payment. We have tried to be sympathetic to local issues but can no longer wait for this information. Your cooperation in providing the data is appreciated.

If you have any questions or need any further clarification, please contact me at 781-338-6594 or by e-mail at jsullivan@doe.mass.edu.

Sincerely,

John J. Sullivan, Director
School Business Services

SCHEDULE 19

CC: School Committee Chair
Municipal Official

10 DEC 21 AM 8:13

CITY CLERK
GLOUCESTER, MA

Rec'd 1-4-11
@ City Clerk

GLOUCESTER CONTRIBUTORY RETIREMENT SYSTEM BOARD

P. O. Box 114
GLOUCESTER, MA 01931-0114

Patricia Ivas, Administrator
E-Mail: pivas@ci.gloucester.ma.us

Tel: (978) 281-9744 Fax: (978) 281-9817

Chairman Douglas A. MacArthur
Board Members: David Bain
Edward Hardy
Kenny Costa
Melissa Hobbs

Susan Walsh, Asst. Administrator
E-Mail: swalsh@ci.gloucester.ma.us

January 3 2011

Jackie Hardy
Council President
City Council, 9 Dale Avenue
Gloucester, MA 01930

Re: Supplemental Pension Allowance to Surviving Spouses of Disabled Employees

Dear Council President Jackie Hardy:

The enacted FY11 State Budget (Chapter 131 of the Acts of 2010) contained several sections that impact Massachusetts General Law Chapter 32 and public retirement systems in Massachusetts.

Section 27, Section 101 of said Chapter 32 as so appearing, is hereby amended by striking out, in line 8 the words "six thousand dollars" and inserting in place thereof the following words- either \$6,000 or, in a retirement system accepting the supplemental annual allowance as provided in this section, \$9,000.

Section 27 establishes a local option to increase the benefit paid under G.L. c 32 section 101. If the Board accepts this option, which it voted to accept unanimously with all Board present, the increased allowance will go into effect on the date of approval, but not earlier than January 1 2011. The acceptance is effective upon filing of certification of the vote with the Commission at P.E.R.A.C, 5 Middlesex Avenue, Suite 304, Somerville, MA 02145. Upon acceptance, the allowances of all individuals receiving an allowance pursuant to G.L. c 32, section 101 will be increased to \$9,000.00 This provision can be accepted at any time. If the acceptance does not take place, the allowance remains payable at \$6,000.00 per year.

Please contact me at 978-281-9744 should you have any questions.

Sincerely,



Patricia Ivas
Administrator

Cc: Honorable Mayor Carolyn A. Kirk
James A Duggan, Chief Administrative Officer

David 1-4-11
@ City Clerk

GLOUCESTER CONTRIBUTORY RETIREMENT SYSTEM BOARD

P. O. Box 114

GLOUCESTER, MA 01931-0114

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Chairman Douglas A. MacArthur

Board Members: David Bain

Edward Hardy

Kenny Costa

Melissa Hobbs

Susan Walsh, Asst. Administrator

E-Mail: swalsh@ci.gloucester.ma.us

January 3 2011

Jackie Hardy
Council President
City Council, 9 Dale Avenue
Gloucester, MA 01930

Re: Cost of Living Increase from 12,000.00 to 14,000.00

Dear Council President Jackie Hardy:

Chapter 188 of the acts of 2010, An Act Relative to Municipal Relief, contained a number of provisions pertaining to public pensions. It became effective on July 27 2010. Under the provisions of Chapter 32, Section 103 (j) inserted by Section 19 of Chapter 188, Retirement Systems may increase the maximum base on which the COLA is calculated in multiples of \$1,000.00 Presently, the amount is \$12,000.00 As you may know, increase approved by the majority vote of the Retirement Board must be approved by the legislative body. COLA's approved would take effect on July 1 2011.

On November 30th 2010 by a unanimous vote and with all Board Members present, the Board voted to increase the COLA from 12,000.00 to 14,000.00

Acceptance by the City Council is deemed to have occurred upon filing of a certification of the vote of the legislative body with P.E.R.A.C (Public Employee Retirement Administration Commission, 5 Middlesex Avenue, Suite 304, Somerville, MA 02145). A decision to accept an increase cannot be revoked.

Should you have any questions, please do not hesitate to contact me.

Sincerely,



Patricia Ivas
Administrator

Cc: Honorable Mayor Carolyn A. Kirk
James A Duggan, Chief Administrative Officer

PERAC

CITY CLERK
GLOUCESTER, MA

COMMONWEALTH OF MASSACHUSETTS | PUBLIC EMPLOYEE RETIREMENT ADMINISTRATION COMMISSION

DOMENIC J. F. RUSSO, *Chairman* | A. JOSEPH DeNUCCI, *Vice Chairman*
PAUL V. DOANE | JAMES M. MACHADO | DONALD R. MARQUIS | ROBERT B. McCARTHY | GREGORY R. MENNIS

JOSEPH E. CONNARTON, *Executive Director*

MEMORANDUM

TO: Gloucester Retirement Board
FROM: *Joseph E. Connarton*
Joseph E. Connarton, Executive Director
RE: Appropriation for Fiscal Year 2012
DATE: December 22, 2010

10 DEC 28 PM 10:20
CITY CLERK
GLOUCESTER, MA

Required Fiscal Year 2012 Appropriation: \$6,543,097

This Commission is hereby furnishing you with the amount to be appropriated for your retirement system for Fiscal Year 2012 which commences July 1, 2011.

Attached please find summary information based on the present funding schedule for your system and the portion of the Fiscal Year 2012 appropriation to be paid by each of the governmental units within your system.

If you have any questions, please contact PERAC's Actuary, Jim Lamenzo, at (617) 666-4446 Extension 921.

JEC/jrl
Attachments

cc: Office of the Mayor
City Council
c/o City Clerk

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Gloucester Retirement Board

Projected Appropriations

Fiscal Year 2012 - July 1, 2011 to June 30, 2012

Aggregate amount of appropriation: **\$6,543,097**

Fiscal Year	Estimated Cost of Benefits	Funding Schedule (Excluding ERI)	ERI	Total Appropriation	Pension Fund Allocation	Pension Reserve Fund Allocation	Transfer From PRF to PF
FY 2012	\$7,431,922	\$6,484,197	\$58,900	\$6,543,097	\$6,543,097	\$0	\$888,825
FY 2013	\$7,783,163	\$6,734,246	\$58,900	\$6,793,146	\$6,793,146	\$0	\$990,017
FY 2014	\$8,150,702	\$7,003,616	\$58,900	\$7,062,516	\$7,062,516	\$0	\$1,088,186
FY 2015	\$8,535,296	\$7,293,792	\$58,900	\$7,352,692	\$7,352,692	\$0	\$1,182,604
FY 2016	\$8,937,735	\$7,596,025	\$58,900	\$7,654,925	\$7,654,925	\$0	\$1,282,810

The Total Appropriation column shown above is in accordance with your current funding schedule and the scheduled payment date(s) in that schedule. Whenever payments are made after the scheduled date(s), the total appropriation should be revised to reflect interest at the rate assumed in the most recent actuarial valuation. Payments should be made before the end of the fiscal year.

For illustration, we have shown the amount to be transferred from the Pension Reserve Fund to the Pension Fund to meet the estimated Cost of Benefits for each year. If there are sufficient assets in the Pension Fund to meet the Cost of Benefits, this transfer is optional.

Gloucester Retirement Board
 Appropriation by Governmental Unit

Fiscal Year 2012 - July 1, 2011 to June 30, 2012

Aggregate amount of appropriation: **\$6,543,097**

UNIT	Percent of Aggregate Amount	Funding Schedule (excluding ERI)	ERI	Total Appropriation
City of Gloucester	93.93%	\$6,090,606	\$48,547	\$6,139,153
Gloucester Housing Authority	6.07%	\$393,591	\$10,353	\$403,944
UNIT TOTAL	100%	\$6,484,197	\$58,900	\$6,543,097

The Total Appropriation column shown above is in accordance with your current funding schedule and the scheduled payment date(s) in that schedule. Whenever payments are made after the scheduled date(s), the total appropriation should be revised to reflect interest at the rate assumed in the most recent actuarial valuation. Payments should be made before the end of the fiscal year.

7 15
1-6-

BY-LAWS GOVERNING THE OPERATION
of the
ESSEX NORTH SHORE AGRICULTURAL AND TECHNICAL SCHOOL DISTRICT

These bylaws are adopted pursuant to Chapter 463 of the Acts of 2004, as amended by Chapter 9 of the Acts of 2006, Chapter 304 of the Acts of 2008 and by Chapter 130 of the Acts of 2010 (collectively, the "Enabling Act") by the representatives of the cities of Beverly, Gloucester, Peabody and Salem, the towns of Boxford, Danvers, Essex, Hamilton, Lynnfield, Manchester-by-the Sea, Marblehead, Middleton, Nahant, Rockport, Swampscott, Topsfield and Wenham (each a "Member Municipality") and also by representatives appointed by the Commissioner of Agriculture of The Commonwealth of Massachusetts (the "Commissioner of Agriculture"), as members of the Essex North Shore Agricultural and Technical School District School Committee.

PART I
THE DISTRICT

CITY CLERK
GLOUCESTER, MA
11 JAN 10 AM 9:13

Section 1.1 Name

The name of the District shall be "Essex North Shore Agricultural and Technical School District" (hereinafter sometimes referred to as the "District").

Section 1.2 Seal

The seal of the District shall bear the name of the District and shall otherwise be in such form as shall be approved by vote of the Committee

PART II
THE REGIONAL DISTRICT SCHOOL COMMITTEE

Section 2.1 Composition of Committee

The powers and duties of the District shall be vested in and exercised by the Essex North Shore Agricultural and Technical School District School Committee (hereinafter sometimes referred to as the "Committee"). The Committee shall consist of 20 members as follows: three members to be appointed by the Commissioner of Agriculture, with the approval of the Governor and one member from each other Member Municipality (each, a "Member"). Members shall be chosen as provided in Sections 2.2, 2.3 or 2.4 and shall be entitled to vote as provided in Sections 2.5, 2.6 and 2.7, and shall serve until their respective successors are appointed and qualified. Upon the effective date of the withdrawal of any Member Municipality, the term of office of the Member representing such Member Municipality shall thereupon terminate.

Section 2.2 Initial Committee

The initial Committee shall be established in accordance with the Enabling Act.

In accordance with the Enabling Act, the Commissioner of Education of The Commonwealth of Massachusetts, or his or her designee (the "Commissioner"), shall fix the time and location of the initial meeting of the Committee and shall preside at such meeting until the election of a chairperson.

Section 2.3 Appointments and Terms

The initial representatives from each of the Member Municipalities shall have terms that expire as follows: (i) the terms of the representatives from the City of Peabody, the Towns of Rockport, Nahant, Boxford, Lynnfield and Essex shall expire on December 31, 2012; (ii) the terms of the representatives from the City of Beverly, the Towns of Topsfield, Hamilton, Swampscott, Wenham, and Marblehead and of Agricultural Representative 1 shall expire on December 31, 2013, and (iii) the terms of the representatives from the Cities of Gloucester and Salem, the Towns of Danvers, Manchester-by-the-Sea, and Middleton and of Agricultural Representatives 2 and 3 shall expire on December 31, 2014.

Within the sixty-day period prior to the expiration of the term of any Member, as determined above, the Commissioner of Agriculture, the Mayor of the City of Peabody, and the mayor of the city or the moderator of the town which such Member represents shall with the consent of the school committee of such city or town other than Peabody, reappoint such Member, or appoint a successor, for a term of three years beginning on the first day of January next following such appointment; and shall likewise make such appointment or reappointment every third year thereafter. The Committee shall be responsible for notifying in writing, the mayor or moderator and the school committee of a city or town at least sixty days prior to the expiration of the term of a Member representing such city or town; and the mayor or moderator shall be responsible for notifying the Committee in writing of the appointment or reappointment of any Member representing such city or town. The time of appointment and the term of a Member representing a municipality subsequently admitted to the District under Part VI of these by-laws shall be specified in the Amendment authorizing such admission. All Members shall serve until their respective successors are duly appointed and qualified.

For the purposes of this section, the consent of the school committee of a Member Municipality shall mean, in the case of a Member Municipality which is part of a regional high school district, the consent of those members of the regional high school district committee who are residents of such Member Municipality.

Section 2.4 Vacancies

If a Member of the Committee dies, or resigns, or ceases to be a resident of the city or town which he or she represents, such office shall be deemed vacant; and the Committee shall notify the Commissioner of Agriculture, or the mayor or moderator represented by such Member, as appropriate, in writing of such vacancy. A vacancy shall be filled in the same manner as provided in Section 2.3 for regular appointments; and the term of a person appointed to fill a vacancy shall begin on receipt by the Committee of a written notification of his or her

appointment from the Commissioner of Agriculture, the mayor or moderator concerned and shall expire on the same date as the term of his predecessor. If any Member fails to attend three successive regularly scheduled meetings of the Committee, the Committee shall so notify the Commissioner of Agriculture or the mayor or moderator of the Member Municipality concerned, as appropriate.

Section 2.5 Allocation of Votes

Each Member shall in any Committee vote or election be entitled to cast one vote. In addition, those Members representing Member Municipalities shall be entitled to cast one additional vote for each fifty students, or major portion thereof, who are residents of the Member's municipality and who are enrolled as full-time students in grades 9 through 12, inclusive, in any school operated by the District as of October 1 of the preceding calendar year.

By way of illustration, additional votes for Member Municipalities with enrollments greater than 25 students shall be allocated as follows:

Enrollment	Additional Votes
26 to 75	1
76 to 125	2
126 to 175	3
176 to 225	4
226 to 275	5
276 to 325	6
326 to 375	7

During the initial year of operation, the additional votes shall be based on enrollment at the Essex Agricultural and Technical High School, the North Shore Vocational Technical School District and the vocational programs at Peabody School District. The Members appointed by the Commissioner of Agriculture shall cast one vote each as provided in the Enabling Act.

Section 2.6 Organization: Transaction of Business

A. At the first meeting of the Committee, the Committee shall organize and elect from its own membership a Chairman, a Vice Chairman and a Secretary to serve until January 12, 2012. The annual meeting of the Committee shall be held on the second Thursday in January of each succeeding year, at which time the Committee shall elect from its own membership a Chairman, Vice Chairman and a secretary to serve until the next annual meeting. At the first meeting of the Committee or at any subsequent meeting, the Committee shall appoint a Treasurer who shall not be a member of the Committee and who shall serve until the next annual meeting or until a successor is duly appointed and qualified for such office; may provide for the election, appointment, removal and terms of such other officers and committees as it deems advisable, and prescribe their powers and duties; and shall adopt an initial budget pursuant to Section 4.1. Minutes of all meetings shall be transmitted to the mayors, and the chairmen of the city council and school committees of a city which is a member of the District and to the moderators, and the chairmen of the boards of selectmen and of the school committees of each Member Municipality (including where applicable both regional and local school committees). The bylaws of the District shall be adopted or amended by a two-thirds vote of the Committee.

B. At any Committee meeting, a majority of the Members shall constitute a quorum for the transaction of business, but a lesser number shall be sufficient to adjourn and to call a special meeting. At any Committee meeting, a majority vote shall mean the vote of a majority of the total number of allocated votes which all the Members present are entitled to cast; a two-thirds majority vote shall mean the votes of two-thirds of the total number of allocated votes which all the Members present are entitled to cast.

C. The Chairman shall preside at all meetings of the Committee, shall appoint and serve as an ex-officio member of all special committees and standing sub-committees, except as otherwise directed by the Committee, and shall perform such other duties as may be delegated to him/her by the Committee or required by law. He/she shall, in the name and on behalf of the District, sign all contracts and other instruments, the execution of which shall have been authorized by the Committee. The Chairman shall be entitled to vote on all matters.

D. If both the Chairman and Vice-Chairman are absent or unable to perform their duties, the Committee shall appoint a temporary Chairman to preside and to perform such other duties of the Chairman as may specifically be delegated to him/her by the Committee. The Superintendent or his/her designee will preside over the election of the temporary Chairman.

E. The Secretary shall keep the minutes of all meetings and maintain permanent records of the proceedings of the Committee. He/she shall be custodian of the District seal, all records of the District, and the Treasurer's bond. If the office of Secretary is vacant or if the Secretary is absent or unable to perform his/her duties because of disability, the Committee may appoint a temporary Secretary to hold such office and exercise the powers and perform the duties thereof until a secretary is duly appointed or the secretary who was disabled or absent resumes his/her duties.

F. The Treasurer shall receive all monies paid to the District or the Committee, and shall deposit the same in such banks as authorized by the Committee. He/she shall also pay out money in such amounts as have been approved by the Committee, provided that he/she shall pay no money from the treasury, other than court judgments, bonds, or notes which may become due and interest thereon, except upon an order or warrant signed by at least a majority of the Committee. He/she shall render reports of all receipts and disbursements monthly unless otherwise directed by the Committee and shall perform such other duties as the Committee may determine. The Treasurer shall give bond for the faithful performance of his/her duties in accordance with the law which shall be in such amount as may be required by law and in any additional amount, if any, as the Committee shall direct, the premium of such bond to be paid as an operating expense of the District. The Committee may appoint an assistant Treasurer who need not be a member of the Committee and who shall, in the absence of the Treasurer, perform his/her duties and shall be subject to the requirements and penalties applicable to him/her.

G. The Committee shall employ a superintendent of schools and fix his/her compensation. The Superintendent shall act in accordance with General Laws, Chapter 71, Section 59, and shall perform such other duties consistent with this section as the Committee may determine. He/she shall also prepare such reports as may be required by the Massachusetts Department of Elementary and Secondary Education, or any successor thereto, and shall submit

materials for the Committee's annual report to the mayors and boards of selectmen of the District's Member Municipalities in sufficient time for printing in the annual reports of the Member Municipalities.

H. Regular meetings of the Committee shall be held on the fourth Thursday of each month at 7:00 p.m. or at such other times as the Committee shall determine. All meetings shall be posted and advertised according to M.G.L. Chapter 30A or any successor provision of the General Laws, as the same shall be amended from time to time. Meetings of the Committee shall conclude no later than 10:30 p.m. unless a quorum is present and votes by a two-thirds majority to continue beyond such time.

I. Special meetings of the Committee may be held at the call of the Chairman, if he/she shall deem it expedient, and shall be held upon the written request of five Members of the Committee. Notice of a special meeting shall be in writing, shall state the time, place and purpose of the meeting, and shall be given to each Member of the Committee either by delivering a copy thereof to each Member in hand, or by leaving the same at the Member's home address at least 48 hours before the time of the special meeting, or by sending such notice by first class mail, postage prepaid, or via an electronic communication, not later than 48 hours, exclusive of Saturdays and Sundays and legal holidays, preceding the day on which such special meeting is to be held. At such special meeting, no business shall be considered other than that designated in the notice except by two-thirds vote as defined in Section 2.6(B) of these By-Laws. Any member of the Committee may waive his/her notice of the time, place and/or purposes of any meeting of the Committee. Any such waiver shall be in writing and shall be filed with the records of the special meeting to which it relates.

- J. The order of business at regular meetings shall be generally as follows:
- A. Call to Order
 - B. Secretary's report and approval of minutes of previous meeting
 - C. Student Representative Report
 - D. Business Manager and Treasurer's report and approval of bills and payrolls
 - E. Communications (by the Committee members and by members of the public who are present)
 - F. Reports and recommendations
 - G. Principal Report of the Superintendent-Director
 - H. Old Business
 - I. Reports of Subcommittees listed on Agenda
 - J. New Business
 - K. Adjournment

The most recently published edition of Robert's Rules of Order shall govern the conduct of the proceedings of the Committee except when those rules are in conflict with any policies and regulations approved by the Committee. Executive sessions of the Committee may be held for any purpose permitted by the General Laws, but only by a majority vote as such term is defined in Section 2.6(B) of these By-Laws. Otherwise, all meetings shall be open to the public.

- I. The official bulletin board of the District for purposes of General Laws, Chapter 39,

Section 28a, shall be the bulletin board in the Committee's offices and notices of all meetings shall be posted in accordance with Chapter 30A of the General Laws (the Open Meeting Law) or any successor statute that may be in effect from time to time.

K. The Committee may from time to time make policies, rules and regulations not inconsistent with the laws of the Commonwealth or these bylaws for the operation and conduct of the District, its schools and programs.

Section 2.7 Powers and Duties

The Committee shall have all the powers and duties conferred and imposed upon it by these by-laws and such other additional powers and duties as are specified in the Enabling Act and any amendments thereto now or hereafter enacted or as may be specified in any other applicable general or special law.

Section 2.8 Process for Filling Vacant Offices

The following procedure will be employed for each office open, whether at the Committee's annual meeting or on the occasion that an office should be vacated during the course of the year.

1. The Chairman shall entertain nominations for each office, beginning with the Chairman, from the membership. Nominations shall not require a second.
2. A motion to close nominations shall require a second, and must be voted on, as any other motion.
3. Should only one nomination for an office be submitted, the Chairman may instruct the secretary to cast one ballot for the nominee.
4. If two or more nominees are submitted for any office, the election of an officer shall be conducted by a roll call vote, with all allocated votes recorded. The Chairman need not vote unless his/her vote shall affect the outcome of the election.
5. The nominee receiving a majority of the allocated votes cast by those present and voting shall be declared the winner. Upon a majority vote of the Members, the vote may be taken by signed paper ballot which is recorded and read by the Secretary.

PART III

APPORTIONMENT AND PAYMENT OF COSTS INCURRED BY THE DISTRICT

Section 3.1 Classification of Costs

For the purpose of apportioning assessments levied by the District against the Member Municipalities, costs shall be divided into three categories capital costs, operating costs and special operating costs.

Section 3.2 Capital Costs

Capital costs shall include all expenses in the nature of capital outlay such as the cost of acquiring land, the cost of constructing, reconstructing, and adding to buildings, and the cost of remodeling or making extraordinary repairs to a school building or buildings, including without limitation the cost of the original equipment and furnishings for such buildings or additions, plans, architects' and consultants' fees, grading and related structures and premises in operating condition, sewage disposal and any other items for which a school district may borrow money. Capital costs shall also include payment of principal of and interest on bonds, notes or other obligations issued by the District to finance capital costs.

Section 3.3 Operating Costs

Operating costs shall include all costs for daytime courses in grades 9-12 operated by the District and not included in capital costs as defined in Section 3.2 or Special Operating Costs as defined in Section 3.4 but including interest on temporary notes issued by the District in anticipation of revenue.

Section 3.4 Special Operating Costs

Special Operating Costs shall include, the net cost of evening, graduate and extension courses or any other types of courses which are offered by the District to persons other than pupils attending a regular District vocational school program in any of grades 9-12, net of any revenues collected by the District on account of such programs.

Section 3.5 Apportionment of Capital and Operating Costs

A. Capital and operating costs for the first fiscal year next following the establishment of the District and for every fiscal year thereafter shall be apportioned to the Member Municipalities on the basis of their respective pupil enrollment in the District schools; provided that, for the purpose of such apportionment each member municipality shall be deemed to have at least five students enrolled full time in grades 9-12 in the District schools each year. Each Member Municipality's share of capital and operating costs for each fiscal year shall be determined by computing the ratio which the enrollment of full time students in grades 9 through 12 from such Member Municipality at such Member Municipality's expense in any school or schools operated by the District bears to the total number of full time students in grades 9-12 from all member municipalities at municipality expense in any school or schools operated by the District on October 1 of the fiscal year next preceding the fiscal year for which the apportionment is determined.

B. In the event that full time student enrollment in any of grades 9-12, inclusive, in the District school system has not been accomplished by October 1 of any such year, capital and operating costs shall be apportioned on the basis of enrollment in grades nine through twelve of pupils residing in each Member Municipality and receiving education at such Member Municipality's expense on October 1 of such year. The Committee by two-thirds vote (as defined in Section 2.6(B) of these By-Laws) may make adjustments in the apportionment

formula set forth in this subparagraph B in the event the Committee determines that such formula does not apportion the initial operating costs consistently with the anticipated use of District school system. The fiscal year shall commence July 1 and end on June 30, or shall be such other fiscal year as may be established by statute for municipal corporations and regional school districts.

Section 3.6 Apportionment of Special Operating Costs

Special Operating Costs shall be apportioned to the Member Municipalities on the basis of the ratio which the enrollment of pupil hours of residents of each Member Municipality in courses described in Section 3.4 on November 1 and March 1 of the fiscal year next preceding the fiscal year for which the apportionment is determined bears to the total enrollment of pupil hours in courses described in Section 3.4 from residents of all member municipalities on such dates.

Section 3.7 Times of Payment of Apportioned Costs

Each Member Municipality shall pay to the District in each fiscal year its proportionate share, certified as provided in Section 4.3 of the capital, operating and special operating costs of the District. Except as otherwise provided in Section 4.1 the annual share of each member municipality shall be paid in such amounts and at such times that at least the following percentages of such annual share shall be paid on or before the dates indicated, respectively:

End of the first fiscal quarter	25%
End of the second fiscal quarter	75%
End of the third fiscal quarter	100%

PART IV

BUDGET

Section 4.1 Initial Budget

The District's annual budget shall be prepared and approved pursuant to section 16B of chapter 71 of the General Laws. District operating and capital expenses in excess of the required local contributions as established under chapter 70 of the General Laws shall be apportioned to the Member Municipalities on the basis of their respective pupil enrollment in the District; but, for the purpose of the apportionment each Member Municipality shall be considered to have at least 5 full-time students. During the initial year of operation, any budgets and assessments approved before the July 1 preceding the opening of the District, pursuant to the North Shore Vocational Regional School District agreement or chapter 74A of the General Laws, shall have full force and effect. The District shall make appropriate provisions for the initial year of operation with regard to vocational programs transferred from the Peabody school district. In the District's initial fiscal year of operations as a combined entity on the present campus of the Essex Agricultural and Technical High School, the annual budget shall be allocated on the basis of the projected enrollments set forth in Exhibit A to these by-laws.

Prior to the commencement of operations as a combined entity, all Capital and Operating Costs related to the design and construction of a new combined District High School on the present campus of the Essex Agricultural and Technical High School, net of any grants received by the District on account of such project, shall be allocated on the basis of the projected enrollments set forth in Exhibit A to these by-laws.

Section 4.2 Tentative Operating and Maintenance Budget

Thereafter, the Committee shall annually prepare a tentative operating and maintenance budget for the ensuing fiscal year, attaching thereto provision for any installment of principal or interest to become due in such year on any bonds or other evidence of indebtedness of the District and any other capital costs to be apportioned to the Member Municipalities. The Committee shall submit to the mayor of each member city and to the Chairman of the finance or advisory committee of each member town a copy of such tentative operating and maintenance budget on or before February 15 which shall be itemized as follows or be in such further detail as the Committee may deem advisable:

1. Administration
2. Instructional Leadership
3. Classroom and Specialist Teachers
4. Other Teaching Services
5. Professional Development
6. Instructional Materials, Equipment and Technology
7. Guidance Counseling and Testing
8. Pupil Services
9. Operations and Maintenance
10. Insurance, Retirement and Other

Section 4.3 Final Operating and Maintenance Budget

The Committee shall adopt an annual operating and maintenance budget, including debt and interest charges and any other current capital costs as separate items, not later than April 30 before the ensuing fiscal year, and the said Committee shall apportion the amounts necessary to be raised in order to meet the said budget in accordance with the provisions of Part II. The amounts so apportioned to each Member Municipality shall be certified by the District Treasurer to the Treasurer of each Member Municipality, prior to April 30, of each year.

Section 4.4 Incurring of Debt

Whenever the Committee authorizes the incurring of debt, except for temporary debt in anticipation of revenue to be received from any source in accordance with Chapter 71, Section 16(g) of the General Laws, such debt may be incurred if two-thirds of the Member Municipalities do not vote disapproval within sixty days following the date on which such debt was authorized by the Committee, provided that said Member Municipalities which have not voted disapproval agree, within ninety days of the date on which such debt was authorized, to pay the total bond indebtedness authorized by the Committee without contribution by the Member Municipalities which voted disapproval of the amount of said debt. The Member Municipalities which have voted disapproval of such indebtedness shall have the right to retain their membership in the District as provided herein, except that they shall not be allowed to any added enrollment that might result solely from the expansion of facilities that occurs on account of such new indebtedness. Within seven days following the authorization of indebtedness by the Committee, the Committee shall cause written notice of the date that such indebtedness was authorized by the Committee, the amount of the indebtedness and of the general purposes for which it was authorized and of the procedure for approval to be followed, to the city council of each member city and the board of selectmen of each member town.

Section 4.5 Establishment of Surplus Account, Limitation of Operating Surplus

As required by the Enabling Act, there is hereby established on the books and accounts of the District, a capital reserve fund for the purpose of financing necessary facility maintenance and capital improvements. The capital reserve fund shall be subject to the limits on stabilization funds in section 16G 1/2 of chapter 71 of the General Laws.

PART V

LOCATION AND TRANSPORTATION

Section 5.1 School Location

The District school or schools shall be located on the property occupied as of July 1, 2009 by the Essex Agricultural and Technical High School in Danvers, Massachusetts.

Section 5.2 Transportation

The District shall be responsible for the transportation of its students in accordance with Sections 7A and 16C of the Chapter 71 of the General Laws. Transportation for non-resident students enrolled in the agricultural vocational programs shall be limited to students residing in municipalities within a 10 mile radius of the District, as determined by the Commissioner of the Department of Elementary and Secondary Education. The unreimbursed cost of transporting students, if any, shall be apportioned to the Member Municipalities as an operating cost, and shall otherwise be subject to the terms of the Enabling Act.

PART VI

AMENDMENTS

Section 6.1 Limitation

These by-laws may be amended by two-thirds vote of the Committee (as defined in Section 2.6(B) of these By-Laws), but no amendment shall be made which shall substantially impair the rights of the holders of any bonds, notes or other obligations of the District then outstanding, or the rights of the District to procure the means for payment thereof, provided that nothing in this Section shall prevent the admission of a new municipality or municipalities to the District and the reapportionment accordingly of capital costs of the District represented by bonds or notes of the District then outstanding and of interest thereon. Any vote to amend these bylaws may be taken at a regular or special meeting of the Committee, provided a copy of the proposed amendment has been mailed, postage prepaid, to each Member at least five days prior to the regular or special meeting at which the proposed amendment is to be acted upon, provided further that the requirement for providing a written copy of the proposed amendment shall not apply if all Members of the Committee are present and vote in favor of the proposed amendment.

PART VII

ADMISSION OF ADDITIONAL MUNICIPALITIES TO THE DISTRICT

By an amendment of these by-laws, any other municipality or municipalities may be admitted to the District upon adoption as therein provided of such amendment and upon acceptance by the municipality or municipalities seeking admission of the bylaws as so amended and also upon compliance with such provisions of law as may be applicable and such terms as may be set forth in any such amendment.

PART VIII

WITHDRAWAL

Section 8.1 Limitations

The withdrawal of a Member Municipality from the District may be effected by an amendment to these by-laws in the manner hereinafter provided by this section. Any Member Municipality seeking to withdraw shall, by vote at an annual or special town meeting in the case of a town or by vote of the city council in the case of a city, request the Committee to draw up an amendment to these by-laws setting forth the terms by which such Member Municipality may withdraw from the District, provided (1) that the Member Municipality seeking to withdraw shall remain liable for any unpaid operating costs which have been certified by the Treasurer of the District to the Treasurer of the withdrawing Member Municipality including the full amount so certified for the year in which such withdrawal takes effect and, (2) that the said Member Municipality shall remain liable to the District for its share of the indebtedness of the District outstanding at the time of such withdrawal, and for interest thereon, to the extent and in the same manner as though the Member Municipality had not withdrawn from the District.

Section 8.2 Procedure

The clerk of the Member Municipality seeking to withdraw shall notify the Committee in writing that such Member Municipality has voted to request the Committee to prepare an amendment to these by-laws (enclosing a certified copy of such vote). Thereupon the Committee shall draw up an amendment to these by-laws setting forth such terms of withdrawal as it shall approve by a vote of two-thirds of the Committee, but subject to the limitations contained in Section 8.1. The secretary of the Committee provide form of the proposed amendment to the Member Municipality desiring to withdraw from the District. If such Member Municipality is a city, the proposed amendment shall be effective if approved within 60 days of its approval by the Committee, by the mayor and a majority vote of all members of the city council of such Member Municipality. If such Member Municipality is a town, the proposed amendment shall be effective if approved within ninety days of its approval by the Committee by a majority vote of the town meeting of such Member Municipality

Section 8.3 Cessation of Term of Office

Upon the effective date of withdrawal the term of office of the Member serving on the Committee from the withdrawing Member Municipality shall terminate and the total membership of the Committee shall be decreased accordingly.

Section 8.4 Payments of Certain Capital Costs Made By a Withdrawing Municipality

Money received by the District from the withdrawing Member Municipality for payment of funded indebtedness or interest thereon shall be used only for such purpose and until so used shall be deposited in trust in the name of the District with a Massachusetts bank or trust company having a combined capital and surplus of not less than \$50,000,000.

Section 8.5 Apportionment of Costs After Withdrawal

The withdrawing Member Municipality's annual share of any future installment of principal and interest on obligations outstanding on the effective date of its withdrawal shall be

fixed at the average percentage prevailing for such Member Municipality at the last three annual apportionments made next prior to the effective date of the withdrawal. The remainder of any such installment, after subtracting the shares of any Member Municipality or Municipalities that have withdrawn, shall be apportioned to the remaining Member Municipalities in the manner provided in Section 3.5 or as may be otherwise provided in the amendment providing for such withdrawal. Tuitions for students from a city or town that has withdrawn from the District, shall be determined in accordance with Chapter 74 of the General Laws.

PART IX

ADVISORY COMMITTEES

The Committee may, to assist it in the construction of any regional school building, appoint a building committee to advise it with respect to plans, specifications, appointment of architects, engineers, the letting of contracts, the supervision of construction, and any other assistance which the Committee may desire, and may appoint such other advisory committees as in its judgment may be necessary or as are required by law.

PART X

APPROVAL

These by-laws shall be effective by two-thirds vote of the Committee (as defined in Section 2.6(B) of these By-Laws) in accordance with the Enabling Act duly adopted as of this _____ day of January, 2011.

**Essex North Shore Agricultural and Technical School District
Vote to Authorize Borrowing for New District High School Project**

VOTED: That the Essex North Shore Agricultural and Technical School District (the "District") hereby appropriates the sum of One Hundred Thirty-Three Million Seven Hundred Seventy Thousand Dollars (\$133,770,000) to pay costs of designing, constructing, originally equipping and furnishing a new District High School located at Maple Street in Hathorne (the "Project"), which school facility shall have an anticipated useful life as an educational facility for the instruction of school children of at least 50 years, said sum to be expended at the direction of the School Building Committee, and to meet this appropriation there is hereby authorized, under and pursuant to Chapter 463 of the Acts of 2004, as amended and supplemented to the date hereof, Chapter 71, Section 16(d) and Chapter 70B of the General Laws and the District By-Laws, as amended, and any other enabling authority, the incurring of debt on the full faith and credit of the District in the amount of One Hundred Thirty-Three Million Seven Hundred Seventy Thousand Dollars (\$133,770,000); that the District acknowledges that the Massachusetts School Building Authority's ("MSBA") grant program is a non-entitlement, discretionary program based on need, as determined by the MSBA, and any costs of the Project that the District incurs in excess of any grant approved by and received from the MSBA shall be the sole responsibility of the District, provided further that any grant that the District may receive from the MSBA for the Project shall not exceed the lesser of (1) sixty-two percent (62%) of eligible, approved project costs, as determined by the MSBA, or (2) the total maximum grant amount determined by the MSBA, and that the total amount of the borrowing authorized by this vote shall be reduced by any grant amount set forth in the Project Funding Agreement that may be executed between the District and the MSBA, and reduced further by all amounts contributed towards the cost of the Project by The Commonwealth of Massachusetts on account of the Essex Agricultural and Technical High School.

VOTED: That within seven (7) days from the date on which this vote is adopted the Secretary be and hereby is instructed to notify each of the Member Municipalities of the District as to the amount and general purposes of the debt herein authorized, as required by Chapter 71, Section 16(d) of the General Laws, and by the District By-Laws."

CITY CLERK
GLOUCESTER, MA
11 JAN 10 AM 8:11

Essex North Shore Agricultural and Technical High School, Massachusetts

Total Project Costs:	\$	133,770,000
Ineligible Project Costs:	\$	8,770,000
MSBA Eligible Share	\$	125,000,000
MSBA Reimbursement Level:		62.00%
MSBA Grant	\$	77,590,000
State Lump Sum Payment (Division of Capital Mgmt):	\$	21,101,250
Sale Proceeds from North Shore Tech Bldg:	\$	4,000,000
District's Local Share of Project Costs:	\$	31,168,750
Projected Interest Rate on 3/15/11 Notes:		2.00%
Projected Interest Rate on 1/15/12 & 6/15/12 Notes:		3.00%
Projected Interest Rate on 6/15/13 Bonds:		5.00%
Total Enrollment:		707

School Financing Plan 1 - 30 Year Equal Principal Structure

Fiscal Year	Short-Term Interest	\$31,168,750 Local Share of Bonds Dated 6/15/13	Total Projected Debt Service
2012	270,833	-	270,833
2013	935,063	-	935,063
2014	-	2,637,188	2,637,188
2015	-	2,579,500	2,579,500
2016	-	2,525,750	2,525,750
2017	-	2,472,000	2,472,000
2018	-	2,418,250	2,418,250
2019	-	2,364,500	2,364,500
2020	-	2,310,750	2,310,750
2021	-	2,257,000	2,257,000
2022	-	2,203,250	2,203,250
2023	-	2,149,500	2,149,500
2024	-	2,095,750	2,095,750
2025	-	2,042,000	2,042,000
2026	-	1,988,250	1,988,250
2027	-	1,934,500	1,934,500
2028	-	1,880,750	1,880,750
2029	-	1,827,000	1,827,000
2030	-	1,773,250	1,773,250
2031	-	1,719,500	1,719,500
2032	-	1,665,750	1,665,750
2033	-	1,612,000	1,612,000
2034	-	1,558,250	1,558,250
2035	-	1,504,500	1,504,500
2036	-	1,450,750	1,450,750
2037	-	1,397,000	1,397,000
2038	-	1,343,250	1,343,250
2039	-	1,289,500	1,289,500
2040	-	1,235,750	1,235,750
2041	-	1,177,000	1,177,000
2042	-	1,123,500	1,123,500
Total	1,205,896	54,535,938	55,741,833

Assumptions:

- † Cash flow estimated.
- † MSBA reimbursement based upon eligible project costs.
- † Assumes Governor's Office/Division of Capital Asset Mgmt proceeds will be received as a lump sum payment.
- † Bonds structured on an equal principal basis; maximum term of 30 years.



CITY CLERK
GLOUCESTER, MA

11 JAN 10 AM 8:11

Essex North Shore Agricultural and Technical High School, Massachusetts

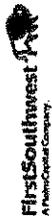
MEMBER MUNICIPAL ENROLLMENT:

City of Beverly	125
Town of Boxford	12
Town of Danvers	91
Town of Essex	8
City of Gloucester	67
Town of Hamilton	8
Town of Lynnfield	11
Town of Manchester	6
Town of Marblehead	8
Town of Middleton	20
Town of Nahant	5
City of Peabody	181
Town of Rockport	12
City of Salem	136
Town of Swampscott	27
Town of Topsfield	5
Town of Wenham	5
TOTAL ENROLLMENT	707

Member Municipality Proration of Debt Service

Fiscal Year	Equals Net Total Debt Service	Beverly Debt Service Proration	Boxford Debt Service Proration	Danvers Debt Service Proration	Essex Debt Service Proration	Gloucester Debt Service Proration	Hamilton Debt Service Proration	Lynnfield Debt Service Proration	Manchester Debt Service Proration	Marblehead Debt Service Proration	Middleton Debt Service Proration	Nahant Debt Service Proration	Peabody Debt Service Proration	Rockport Debt Service Proration	Salem Debt Service Proration	Swampscott Debt Service Proration	Topsfield Debt Service Proration	Wenham Debt Service Proration
2012	270,833	47,884	4,597	34,860	3,065	25,666	3,065	4,214	1,915	3,448	7,861	1,915	61,875	4,597	52,098	10,343	1,915	1,915
2013	935,053	165,322	15,971	120,355	10,581	88,613	10,581	14,548	6,613	11,903	28,452	6,613	212,935	15,871	179,871	35,710	6,613	6,613
2014	2,637,188	468,264	44,761	339,440	29,841	249,917	29,841	41,031	18,651	33,571	74,602	18,651	600,548	44,761	507,295	100,713	18,651	18,651
2015	2,579,500	456,064	43,782	332,015	29,188	244,450	29,188	40,134	18,243	32,837	72,970	18,243	587,411	43,782	496,198	98,510	18,243	18,243
2016	2,525,750	448,561	42,870	325,097	28,580	239,357	28,580	39,297	17,862	32,152	71,450	17,862	575,171	42,870	485,859	96,457	17,862	17,862
2017	2,472,000	437,058	41,958	318,178	27,972	234,263	27,972	38,461	17,482	31,468	69,929	17,482	562,931	41,958	475,519	94,405	17,482	17,482
2018	2,364,500	418,052	40,133	304,342	26,755	224,076	26,755	36,788	16,732	30,100	68,888	16,732	550,691	40,133	454,840	92,352	17,102	17,102
2019	2,310,750	409,548	39,221	297,423	26,147	219,982	26,147	35,952	16,342	29,415	65,388	16,342	526,210	39,221	444,501	88,246	16,342	16,342
2020	2,257,000	399,045	38,308	290,505	25,539	213,888	25,539	35,116	15,962	28,731	63,947	15,962	513,970	38,308	434,161	86,194	15,962	15,962
2021	2,203,250	389,542	37,398	283,567	24,931	208,795	24,931	34,280	15,582	28,047	62,327	15,582	501,730	37,398	423,622	84,141	15,582	15,582
2022	2,149,500	380,039	36,484	276,668	24,322	203,701	24,322	33,443	15,202	27,363	60,806	15,202	489,490	36,484	413,462	82,089	15,202	15,202
2023	2,095,750	370,536	35,571	269,750	23,714	198,607	23,714	32,607	14,821	26,679	59,286	14,821	477,260	35,571	403,143	80,036	14,821	14,821
2024	2,042,000	361,033	34,659	262,832	23,106	193,513	23,106	31,771	14,441	25,994	57,785	14,441	465,010	34,659	392,803	77,983	14,441	14,441
2025	1,988,250	351,529	33,747	255,913	22,498	188,420	22,498	30,935	14,061	25,310	56,245	14,061	452,770	33,747	382,464	75,930	14,061	14,061
2026	1,934,500	342,026	32,835	248,995	21,890	183,326	21,890	30,098	13,681	24,626	54,724	13,681	440,530	32,835	372,124	73,878	13,681	13,681
2027	1,880,750	332,523	31,922	242,077	21,281	178,232	21,281	29,262	13,301	23,942	53,204	13,301	428,290	31,922	361,785	71,825	13,301	13,301
2028	1,827,000	323,020	31,010	235,158	20,673	173,139	20,673	28,426	12,921	23,257	51,683	12,921	416,050	31,010	351,446	69,772	12,921	12,921
2029	1,773,250	313,517	30,098	228,240	20,065	168,045	20,065	27,580	12,541	22,573	50,163	12,541	403,809	30,098	341,106	67,720	12,541	12,541
2030	1,719,500	304,013	29,185	221,322	19,457	162,951	19,457	26,785	12,161	21,889	48,642	12,161	391,569	29,185	330,767	65,667	12,161	12,161
2031	1,665,750	294,510	28,273	214,403	18,849	157,857	18,849	25,917	11,780	21,205	47,122	11,780	379,329	28,273	320,427	63,614	11,780	11,780
2032	1,612,000	285,007	27,361	207,485	18,240	152,764	18,240	25,081	11,400	20,521	45,601	11,400	367,089	27,361	310,088	61,562	11,400	11,400
2033	1,558,250	275,504	26,448	200,567	17,632	147,670	17,632	24,244	11,020	19,836	44,081	11,020	354,849	26,448	299,748	59,509	11,020	11,020
2034	1,504,500	266,001	25,538	193,649	17,024	142,576	17,024	23,408	10,640	19,152	42,560	10,640	342,609	25,538	289,409	57,458	10,640	10,640
2035	1,450,750	256,498	24,624	186,730	16,416	137,483	16,416	22,572	10,260	18,468	41,040	10,260	330,369	24,624	279,069	55,403	10,260	10,260
2036	1,397,000	246,994	23,711	179,812	15,808	132,389	15,808	21,736	9,880	17,784	39,519	9,880	318,129	23,711	268,730	53,351	9,880	9,880
2037	1,343,250	237,491	22,799	172,894	15,199	127,295	15,199	20,899	9,500	17,099	37,999	9,500	305,889	22,799	258,390	51,299	9,500	9,500
2038	1,289,500	227,988	21,887	165,975	14,591	122,202	14,591	20,063	9,120	16,415	36,478	9,120	293,649	21,887	248,051	49,245	9,120	9,120
2039	1,235,750	218,485	20,975	159,057	13,983	117,108	13,983	19,227	8,739	15,731	34,958	8,739	281,408	20,975	237,711	47,193	8,739	8,739
2040	1,177,000	208,989	19,977	151,495	13,318	111,544	13,318	18,313	8,324	14,983	33,286	8,324	269,030	19,977	226,410	44,949	8,324	8,324
2041	1,123,500	198,539	19,069	144,609	12,713	106,470	12,713	17,460	7,946	14,302	31,782	7,946	255,847	19,069	216,119	42,908	7,946	7,946
2042	1,070,000	188,039	18,149	137,890	12,103	101,367	12,103	16,546	7,531	13,617	30,257	7,531	242,614	18,149	205,824	40,859	7,531	7,531
Total	55,741,833	9,855,345	946,113	7,174,691	630,742	5,282,465	630,742	867,270	394,214	709,585	1,576,855	394,214	12,693,685	946,113	10,722,616	2,128,795	394,214	394,214

Assumptions:
 † Enrollment figures are estimated.
 ‡ Debt service proration based upon estimated enrollment figures.



Essex North Shore Agricultural and Technical High School, Massachusetts
Construction Cash Flow / Issue Proceeds

School Financing Plan 1 - 30 Year Equal Principal Structure

Date	Planning/ Design	School Construction	Total Draw	Note/Bond Proceeds	Additional Revenue DCAM & Sale Proceeds	MSBA Progress Payments	Available Funds	Funds Available for Investment
Mar-11	125,000	-	125,000	5,000,000	-	-	5,000,000	4,875,000
Apr-11	250,000	-	250,000	-	-	88,798	4,843,798	4,693,798
May-11	300,000	-	300,000	-	-	137,596	4,831,394	4,531,394
Jun-11	400,000	-	400,000	-	-	168,115	4,896,510	4,296,510
Jul-11	550,000	-	550,000	-	-	220,154	4,516,664	3,966,664
Aug-11	735,000	-	735,000	-	-	302,712	4,269,376	3,534,376
Sep-11	825,000	-	825,000	-	-	404,533	3,936,909	3,113,909
Oct-11	850,000	-	850,000	-	-	454,088	3,587,978	2,717,978
Nov-11	930,000	-	930,000	-	-	467,827	3,185,803	2,255,803
Dec-11	950,000	-	950,000	-	-	511,858	2,767,681	1,817,661
Jan-12	955,000	-	955,000	10,000,000	-	522,866	12,340,527	11,385,527
Feb-12	975,000	-	975,000	-	-	525,618	11,911,145	10,936,145
Mar-12	950,000	-	950,000	-	-	536,625	11,472,770	10,522,770
Apr-12	825,000	-	825,000	-	-	522,866	11,045,636	10,220,636
May-12	700,000	-	700,000	-	-	484,068	10,674,704	9,874,704
Jun-12	650,000	-	650,000	18,168,750	-	385,269	26,528,723	25,878,723
Jul-12	500,000	-	500,000	-	-	357,750	26,236,473	25,736,473
Aug-12	475,000	-	475,000	-	-	275,192	26,011,866	25,538,666
Sep-12	425,000	-	425,000	-	-	261,433	25,798,099	25,373,099
Oct-12	350,000	-	350,000	-	-	233,914	25,607,012	25,257,012
Nov-12	275,000	-	275,000	-	-	192,635	25,449,647	25,174,647
Dec-12	250,000	-	250,000	-	-	151,386	25,326,003	25,076,003
Jan-13	125,000	-	125,000	-	-	137,596	25,213,599	25,088,599
Feb-13	-	1,750,000	1,750,000	-	21,101,250	68,798	46,258,847	44,688,647
Mar-13	-	3,175,000	3,175,000	-	-	963,174	45,471,821	42,298,821
Apr-13	-	3,525,000	3,525,000	-	-	1,747,472	44,044,293	40,519,293
May-13	-	4,500,000	4,500,000	-	-	1,940,107	42,459,400	37,959,400
Jun-13	-	5,950,000	5,950,000	-	-	2,476,732	40,436,133	34,486,133
Jul-13	-	6,500,000	6,500,000	-	-	3,274,791	37,760,924	31,260,924
Aug-13	-	7,025,000	7,025,000	-	-	3,577,502	34,838,426	27,813,426
Sep-13	-	7,750,000	7,750,000	-	-	3,866,455	31,679,881	23,929,881
Oct-13	-	8,400,000	8,400,000	-	-	4,265,484	28,195,364	19,795,364
Nov-13	-	9,200,000	9,200,000	-	-	4,623,234	24,418,598	15,218,598
Dec-13	-	9,600,000	9,600,000	-	-	5,063,542	20,282,140	10,682,140
Jan-14	-	9,575,000	9,575,000	-	-	5,283,696	15,965,836	7,390,836
Feb-14	-	7,300,000	7,300,000	-	-	4,719,551	12,110,387	4,810,387
Mar-14	-	6,100,000	6,100,000	-	-	4,017,810	8,028,198	2,728,198
Apr-14	-	5,750,000	5,750,000	-	-	3,357,348	6,085,546	335,546
May-14	-	5,500,000	5,500,000	-	4,000,000	3,164,714	7,500,260	2,000,260
Jun-14	-	4,500,000	4,500,000	-	-	3,027,117	5,027,377	527,377
Jul-14	-	3,750,000	3,750,000	-	-	2,476,732	3,004,110	(745,690)
Aug-14	-	3,250,000	3,250,000	-	-	2,082,944	1,318,053	(1,931,947)
Sep-14	-	2,750,000	2,750,000	-	-	1,789,751	(143,195)	(2,893,195)
Oct-14	-	2,250,000	2,250,000	-	-	1,515,559	(1,379,637)	(3,629,637)
Nov-14	-	1,750,000	1,750,000	-	-	1,236,366	(2,391,270)	(4,141,270)
Dec-14	-	1,550,000	1,550,000	-	-	963,174	(3,176,097)	(4,726,097)
Jan-15	-	-	-	-	-	4,726,097	0	0
	13,370,000	120,400,000	133,770,000	31,168,750	25,101,250	77,500,000		

Essex North Shore Agricultural and Technical High School, Massachusetts

Bond Anticipation Note Schedule

School Financing Plan 1 - 30 Year Equal Principal Structure

DATED	DUE	AMOUNT	TYPE	TERM (IN DAYS)	30/360 Day Count RATE	INTEREST	FY TOTAL
3/15/2011	1/15/2012	\$ 5,000,000	New Money	300	2.00%	\$83,333	
1/15/2012	6/15/2012	\$ 15,000,000	Renewal (New)	150	3.00%	\$187,500	
6/15/2012	6/15/2013	\$ 15,000,000	Renewal (New)	360	3.00%	\$450,000	\$270,833 FISCAL 2012
6/15/2012	6/15/2013	\$ 16,168,750	Renewal	360	3.00%	\$485,063	\$935,063 FISCAL 2013

\$ 1,205,896

Long-Term Bond Debt Service Schedule
 Essex North Shore Agricultural and Technical High School, Massachusetts
 School Financing Plan 1 - 30 Year Equal Principal Structure
 \$31,168,750 Local Share of Bonds Dated 6/15/13

EQUAL PRINCIPAL DEBT SERVICE SCHEDULE

<u>Fiscal Year</u>	<u>Principal</u>	<u>Coupon</u>	<u>Interest</u>	<u>Total P+I</u>
6/30/2014	1,078,750	5.00%	1,558,438	2,637,188
6/30/2015	1,075,000	5.00%	1,504,500	2,579,500
6/30/2016	1,075,000	5.00%	1,450,750	2,525,750
6/30/2017	1,075,000	5.00%	1,397,000	2,472,000
6/30/2018	1,075,000	5.00%	1,343,250	2,418,250
6/30/2019	1,075,000	5.00%	1,289,500	2,364,500
6/30/2020	1,075,000	5.00%	1,235,750	2,310,750
6/30/2021	1,075,000	5.00%	1,182,000	2,257,000
6/30/2022	1,075,000	5.00%	1,128,250	2,203,250
6/30/2023	1,075,000	5.00%	1,074,500	2,149,500
6/30/2024	1,075,000	5.00%	1,020,750	2,095,750
6/30/2025	1,075,000	5.00%	967,000	2,042,000
6/30/2026	1,075,000	5.00%	913,250	1,988,250
6/30/2027	1,075,000	5.00%	859,500	1,934,500
6/30/2028	1,075,000	5.00%	805,750	1,880,750
6/30/2029	1,075,000	5.00%	752,000	1,827,000
6/30/2030	1,075,000	5.00%	698,250	1,773,250
6/30/2031	1,075,000	5.00%	644,500	1,719,500
6/30/2032	1,075,000	5.00%	590,750	1,665,750
6/30/2033	1,075,000	5.00%	537,000	1,612,000
6/30/2034	1,075,000	5.00%	483,250	1,558,250
6/30/2035	1,075,000	5.00%	429,500	1,504,500
6/30/2036	1,075,000	5.00%	375,750	1,450,750
6/30/2037	1,075,000	5.00%	322,000	1,397,000
6/30/2038	1,075,000	5.00%	268,250	1,343,250
6/30/2039	1,075,000	5.00%	214,500	1,289,500
6/30/2040	1,075,000	5.00%	160,750	1,235,750
6/30/2041	1,070,000	5.00%	107,000	1,177,000
6/30/2042	1,070,000	5.00%	53,500	1,123,500
Total	31,168,750		23,367,188	54,535,938

City Hall
Nine Dale Avenue
Gloucester, MA 01930



CITY OF GLOUCESTER
OFFICE OF THE MAYOR

TEL 978-281-9700
FAX 978-281-9738
ckirk@gloucester-ma.gov

December 2, 2010

Jay Baker, Director
Massachusetts Bays Program
251 Causeway St., Suite 800
Boston, MA 02114-2126

Re: Massachusetts Bays Program Research and Planning Grants
FY 2011
Request for Responses: ENV 11 CZM 02

Dear Mr. Baker:

I strongly support the project proposal and this grant application developed and prepared by the Gloucester Community Development Department. As a coastal community we are inherently an integral part of climate change. It only makes sense to support research efforts that help us meet the challenges ahead. This proposal is a logic next step to inform the discussion and define the timeframes necessary for how we plan for future development, while limiting risk. I am authorizing the staff time designated to provide the 25% local match and initiative on this project.

The proposed project is based on a proven methodology developed in Hull and will provide Gloucester with a compelling necessary tool to focus our efforts on resource protection and climate change adaptation strategies as needed.

Sincerely,


Carolyn A. Kirk
Mayor

City Hall Annex
Three Pond Road
Gloucester, MA 01930



TEL 978-281-9781
FAX 978-281-9779
sbuck@ci.gloucester.ma.us

CITY OF GLOUCESTER
COMMUNITY DEVELOPMENT DEPARTMENT

MEMORANDUM

TO: Mayor Carolyn Kirk
FROM: Sarah Garcia, Community Development Director *Sarah Garcia*
RE: Grant funding for Wind Turbine Feasibility Study Magnolia Woods Recreational Area
CC: Susan St. Pierre, Project Manager Clean Energy
Gregg Cademartori, City Planner
DATE: January 3, 2011

I am pleased to inform you that the City has been awarded an \$85,000 grant from the Massachusetts Clean Energy Center (MassCEC) to undertake a feasibility study for the installation of up to a 2MW wind turbine on City owned land in the vicinity of the Magnolia Woods Recreational Area. The Community Development staff will be working with the consulting firm of Meridian Associates to develop this study over the next several months. There is a small local match that is being met with the same Clean Energy green-up funds that support our part-time Clean Energy Project Manager.

Please forward our request to accept this grant to the City Council for their consideration.

Please also transmit to City Council, for information only, the City's application for a small research and planning grant from the Massachusetts Bays Program. We have requested \$22,000 for a study of climate change vulnerability from sea-level rise on selected public properties. The Planning Director and IT Department have partnered to provide in-kind (non-financial) support for this study.

Finally, as part of our successful designation as a Green Community, we are eligible for up to \$198,200 in grant funding for energy conservation or energy renewable projects. Our request for the funding is due January 21st. The Clean Energy Commission, in consultation with the school department, has identified a new boiler system at the Beeman School as the top priority. Depending on the final estimated cost of the boiler, the city may be able to apply for additional projects. The CEC is considering an assessment of the solar roof potential at the Beeman School and the High School, as well as considering addressing air leakage at City Hall and possibly an engineering study of a new HVAC system for the building.

Please transmit our request to the City Council to apply for the Green Communities funding.

Thank you.

ATTACHMENT C



CITY OF GLOUCESTER
PLANNING BOARD
3 POND ROAD • GLOUCESTER, MA 01930
TEL 978-281-9781
FAX 978-281-9779

December 2, 2010

Jay Baker, Director
Massachusetts Bays Program
251 Causeway St., Suite 800
Boston, MA 02114-2126

Re: Massachusetts Bays Program Research and Planning Grants
FY 2011
Request for Responses: ENV 11 CZM 02

Dear Mr. Baker:

Having recently participated in a role playing game to stimulate discussion on climate change, lead and designed by MIT-USGS Science Impact Collaborative, I strongly support the project proposal and grant application developed and prepared by the Gloucester Planning Division. As a coastal community we are faced by very real potential impacts of sea level rise and flooding. It is important to find ways to better articulate the potential impacts. This proposal is a logic next step to focus the discussion of how we plan for future development, while limiting risk.

The proposed project is based on a proven methodology developed in Hull and will provide Gloucester with a compelling necessary tool to focus our efforts on resource protection and climate change adaptation strategies as needed.

Sincerely,

Richard Noonan
Gloucester Planning Board, Chair



CITY OF GLOUCESTER
Conservation Commission
Community Development Department
3 Pond Road Gloucester MA 01930
978-281-9781
f 978-281-9779

December 2, 2010

Jay Baker, Director
Massachusetts Bays Program
251 Causeway St., Suite 800
Boston, MA 02114-2126

Re: Massachusetts Bays Program Research and Planning Grants
FY 2011
Request for Responses: ENV 11 CZM 02

Dear Mr. Baker:

Having recently participated in a role playing game designed by MIT-USGS Science Impact Collaborative, with a focus on potential sea level rise impacts, I strongly support the project proposal and grant application developed and prepared by the Gloucester Community Development Department. As a coastal community we embrace the possibility to be an integral part of research efforts surrounding climate change. We are equally challenged by the potential impacts of climate change with our community surrounded by the sea. This proposal is a logic next step to focus the discussion of how we plan for future development while limiting risk to generations and our treasured coastal environments.

The proposed project is based on a proven methodology developed in Hull and will provide Gloucester with a compelling necessary tool to focus our efforts on resource protection and climate change adaptation strategies.

Sincerely,

Rob Gulla
Conservation Commission, Chair