

# State Publications and Regulations

William Francis Galvin, Secretary of the Commonwealth

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**The following Designer Service submission was successfully received.**

**Planned date of publish is 7/27/2011**

### Awarding Agency

Agency Name and Address:	<b>Town of Orleans, Town Administrator's Office, 19 School Road, Orleans, MA 02653</b>		
Project Number:	<b>CWMP</b>		
Designer's Fee:	<b>Negotiated not to exceed \$150,000</b>		
Estimated Construction Cost:			
Time Period for Completed Project:	<b><u>August 1, 2012</u></b>		

### Contact Information

Name:	<b>Town Administrator's Office</b>		
Phone:	<b>508-240-3700 x 415</b>	Fax	<b>508-240-3703</b>
Email Address:	<b><u>lsurdut@town.orleans.ma.us</u></b>		
	<b><u>Notify email address listed when final publish date assigned.</u></b>		

### Contract Information

Project:	<b><u>The Town Administrator seeks proposals from qualified designers to perform preliminary engineering and detailed cost analyses with the objective of assisting the Town to determine the most cost effective method of addressing its wastewater management needs</u></b>		
Scope:			
Specific Services :(all chosen)	<b><u>Engineer</u></b>		
Deadline for Application Form*:	<b><u>08/26/2011</u></b>	Time	<b><u>3:00 p.m.</u></b>
Project Program Availability:			
Briefing Session:			
Additional Information			

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**TOWN OF ORLEANS  
REQUEST FOR QUALIFICATIONS  
TECHNICAL REVIEW AND COST ANALYSIS OF COMPREHENSIVE  
WASTEWATER MANAGEMENT PLAN OPTIONS**

The Town Administrator seeks proposals from qualified designers, as defined in Chapter 7, Section 38A½ of the General Laws of Massachusetts, to perform preliminary engineering and detailed cost analyses with the objective of assisting the Town to determine the most cost effective method of addressing its wastewater management needs.

The preliminary design criteria shall be based on the Town's six-phase Comprehensive Wastewater Management Plan (CWMP) and the nitrogen removal requirements necessary to meet the Total Maximum Daily Loads (TMDL's) for each of the major watersheds.

Pursuant to a vote of Town Meeting, this study will involve the technical review and cost analysis to develop two wastewater management plan options as follows:

1. The centralized sewage collection, treatment and disposal system as outlined in the Town's current CWMP.
2. An alternative system based on Septic Tank Effluent (STE) collection, treatment and disposal, using cluster or satellite facilities, if and where appropriate.

All proposals must be received by the Town Administrator's Office, 19 School Road, Orleans, MA 02653-3699 by 3:00 pm on August 26, 2011. Any proposal received after this time and date will be returned to the applicant unopened. No exceptions will be allowed. Facsimile or electronic proposals will not be accepted and postmarks will not be considered. One (1) original copy, six (6) photocopies and one (1) copy in electronic format of the proposal must be submitted in a sealed envelope indicating the applicant's name and address and clearly marked in the lower left hand corner "TECHNICAL REVIEW AND COST ANALYSIS OF COMPREHENSIVE WASTEWATER MANAGEMENT PLAN OPTIONS 2011".

Final selection of the Designer will be made on or before September 30, 2011. The project fee shall be negotiated with the maximum cost not to exceed \$150,000. Completion of all Tasks as outlined in the Scope of Services shall be on or before August 1, 2012. In order to maintain complete impartiality please be aware that the selected designer for this project will not be eligible to compete for the subsequent design services contract.

The Town Administrator reserves the right to accept and/or reject any and all proposals and waive any informality in procurement procedures to the extent allowed by law and make the award as may be deemed to be in the best interest of the Town.

John F. Kelly  
Town Administrator

**TOWN OF ORLEANS  
REQUEST FOR QUALIFICATIONS  
TECHNICAL REVIEW AND COST ANALYSIS OF COMPREHENSIVE  
WASTEWATER MANAGEMENT PLAN OPTIONS  
SCOPE OF SERVICES**

The Orleans Town Administrator seeks proposals from qualified designers, as defined in Chapter 7, Section 38 ½ of the General Laws of Massachusetts, to perform preliminary engineering and detailed cost analyses with the objective of assisting the town determine the most cost effective method of addressing its wastewater management needs.

The preliminary design criteria shall be based on the Town's six-phase Comprehensive Wastewater Management Plan (CWMP) and the nitrogen removal requirements necessary to meet the Total Maximum Daily Loads (TMDL's) for each of the major watersheds.

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Final selection of the designer will be made on or before September 30, 2011. The project fee shall be negotiated, with the maximum cost not to exceed \$150,000. Completion of all Tasks as outlined in the project schedule shall be by August 1, 2012. In order to maintain complete impartiality please be aware that the selected designer for this project will not be eligible to compete for the subsequent design services contract.

**BACKGROUND INFORMATION**

The Town of Orleans, Massachusetts, located on Cape Cod, faces unique challenges in wastewater treatment and disposal. Surrounded on three sides by water, Orleans possesses a natural beauty which attracts thousands of visitors each year. The visitors, who come and stay primarily in the summer season, are also attracted by Orleans' downtown area with its retail shops and restaurants. While currently maintaining a year-round population of 6,259 residents,

the seasonal population is estimated at 20,000 to 25,000. This dramatic increase in population places a severe strain on the individual on-site wastewater disposal systems which are used throughout Orleans. The Town is a member of a Tri-Town Groundwater Protection District that operates its own septage treatment facility where waste is delivered and treated prior to discharge into the ground.

The Town is concerned that existing and future development will cause adverse impacts on the quality of the Town's groundwater, freshwater ponds, and marine receiving waters. Already, several marine subembayments exhibit evidence of accelerated eutrophication. The Town has developed a wastewater management plan to protect surface and groundwater from the effects of nitrogen loading associated with development.

The Town began the process of preparing a town-wide Comprehensive Wastewater Management Plan in 2000. The Town has recognized the need to take action to ensure that existing and future development does not adversely affect the fresh and marine resources of the community. The Town is a participant in the Massachusetts Estuaries Program (MEP) for Pleasant Bay (along with Chatham and Harwich), Nauset Estuary, and the three Cape Cod Bay tributaries of Rock Harbor, Namskaket Creek, and Little Namskaket Creek. Both Pleasant Bay and Cape Cod Bay have been designated as Areas of Critical Environmental Concern (ACECs) by the Commonwealth of Massachusetts. The basis for the Town's CWMP is compliance with meeting the total maximum daily loads for nitrogen as determined by the MassDEP.

The Town's current CWMP approach to address wastewater management needs is based on a system comprised primarily of gravity sewage collection with centralized treatment and disposal at a new facility to be constructed on the existing site of the Tri-Town Septage Treatment Facility located on Oak Ridge Lane in Orleans. Recent advances in wastewater management technology have prompted the Town to consider an alternative collection, treatment and disposal concept that utilizes existing septic tanks as the primary method of effluent separation, with new treatment and disposal facilities being constructed on one or more sites.

#### **ONLINE RESOURCES AVAILABLE TO ASSIST IN THE STUDY**

The following documents are available for review and download in electronic format from the Town's website [www.town.orleans.ma.us](http://www.town.orleans.ma.us).

1. Orleans Comprehensive Wastewater Management Plan dated December 2010
2. Engineering Review of Orleans CWMP prepared by CH2M Hill dated September 30, 2010
3. Massachusetts Estuary Project Reports
4. A list of 21 properties identified as having potential to support decentralized systems.

#### **SCOPE OF SERVICES**

The overall scope of the study shall include, but not be limited to, the following tasks:

**Task 1. Conduct a public presentation at a Board of Selectmen's meeting that outlines the Designer's approach to completing each aspect of the study as outlined in the Scope of Services.**

**Task 2. Preliminary engineering design of a centralized, gravity based, sewage collection network with a centralized treatment and disposal system as outlined in the Town’s CWMP:**

1. Development of a detailed collection network sufficient to form the basis of a unit priced comprehensive estimate.
2. Identification of property to be acquired for pump stations and “cross country” branches if necessary.
3. Preliminary design of a sewage treatment and disposal facility, incorporating the latest technological advances and energy efficiency, to be located on the existing Tri-Town Septage Treatment Facility Site as described in the CWMP.

**Task 3. Preliminary engineering design of an alternative system based on Septic Tank Effluent (STE) collection with sewage treatment and disposal, using cluster or satellite facilities, if and where appropriate:**

1. Development of a detailed STE collection network sufficient to form the basis of a unit priced comprehensive estimate.
2. Identification of property to be acquired for satellite treatment sites, pump stations and “cross country” branches if necessary.
3. Preliminary design of sewage treatment and disposal facilities, incorporating the latest technological advances and energy efficiency, to be located either on the existing Tri-Town Septage Treatment Plant Site as described in the CWMP or through the use of clusters or satellite facilities.
4. Provide evidence of investigations as to how other communities of similar size and geographic characteristics have implemented STE Programs and their experiences with these systems to date.

**Task 4. Conduct a public presentation at a Board of Selectmen’s meeting to demonstrate that the two preliminary engineering design options have progressed sufficiently in detail to proceed to the cost estimating phase.**

**Task 5. Develop comprehensive cost estimates for each of the two design options being studied utilizing the services of an independent professional cost estimator to determine the following:**

1. Physical attributes of the entire collection and treatment system for all six phases in present day costs.
2. Engineering costs for all project phases including administration and inspection services during construction.
3. State and Federal permitting fees.
4. New property acquisition costs for potential treatment and disposal facilities, including a projection for siting, permitting, and legal costs.
5. Initial customer hook-up costs.
6. Operation and startup costs, including the procurement of spare parts for normal maintenance for all treatment facilities, pump stations and customer STE components.
7. Staffing costs based on MassDEP requirements for each design option.
8. Life cycle costs for each alternative for a 50 year period.

9. Any other miscellaneous implementation costs or operational/maintenance considerations the Town should anticipate not specifically identified.

**Task 6. Conduct a public presentation at a Board of Selectmen's meeting to review the results of the cost estimates that were developed in Task 5.**

**Task 7. Conduct a public presentation at a Board of Selectmen's meeting that details the draft final report and the Designer's recommended option that addresses, at a minimum, the following attributes:**

1. Overall life cycle costs
2. Benefits of installation, operation, maintenance, energy consumption and equipment replacement
3. Property acquisition efforts that may be required
4. Potential impacts on property values and disruptions to residences and businesses
5. Prepare poster board presentations of key information such as proposed collection networks, treatment sites and potential land acquisitions.

**Task 8. Conduct a public presentation of the final report at a Board of Selectmen's meeting.**

#### **PROJECT SCHEDULE**

- Proposals due by 3:00 pm on August 26, 2011.
- Interviews with selected Designers will be scheduled during the week of September 12, 2011 at a mutually convenient time.
- Final Selection of Designer will be made by September 30, 2011.
- Completion of Task 1 through Task 6 by April 1, 2012.
- Completion of Task 7 by June 1, 2012.
- Completion of Task 8 by August 1, 2012.

#### **PROJECT DELIVERABLES**

1. Provide an electronic version (.pdf format) of all materials used during each Task's public presentation for posting on the Town's website for informational purposes.
2. Provide Fifteen (15) spiral bound copies of the final report that includes all information developed by the Designer in Task 1 through Task 8 in sufficient detail to enable the Town to successfully use this information to proceed to project design development.
3. Provide an electronic version (.pdf format) of the spiral bound final report for posting on the Town's website for informational purposes.

#### **PROJECT COST**

The total fee to complete all activities included in the Scope of Services will be negotiated, but shall not exceed \$150,000.

## **SUBMITTAL REQUIREMENTS AND MINIMUM QUALIFICATIONS**

To receive consideration, all proposals must include the following information:

1. A detailed description of the methodology and level of effort that will be undertaken to complete the two designs suitable for comprehensive cost estimating.
2. A detailed description of the methodology and level of detail to be used for estimating costs associated with each design option.
3. A detailed description of the level of detail that will be provided to enable the Town to proceed with project design development.
4. The names and resumes of the individuals that will be key participants in the study.
5. A completed Standard Designer Application Form Updated July 2011 (copy attached) with all requested information.
6. A Completed Certificate of State Tax Compliance, Certificate of Non-Collusion and Acknowledgment of Principal form, all of which are attached.
7. Designer must carry insurances in accordance with attached requirements.
8. Designer must be registered to practice engineering in Massachusetts.
9. Designer must demonstrate experience in all aspects of engineering required for wastewater management solutions based on both options.
10. Designer must be familiar with all applicable federal, state and local regulations and codes necessary to undertake the completion of the study.

## **EVALUATION OF CRITERIA**

All proposals will be evaluated based on two sets of criteria - **minimum and comparative**. Proposals must address each of the points under both the minimum and comparative evaluation criteria.

## **MINIMUM EVALUATION CRITERIA**

Each proposal must meet all the following criteria in order to be considered for further evaluation.

**Years in business:** Provide evidence that the Design Firm has been in business for a minimum of ten (10) years.

**Number of Municipal Clients:** Provide evidence of least five (5) engineering studies of wastewater collection and treatment projects which the Design Firm has successfully completed during the past ten (10) years.

**Project Completion:** Acknowledgement that the Scope of Services as described in the RFQ shall be completed in accordance with the proposed schedule for each Task with the final report being delivered by August 1, 2012.

Proposals which do not meet the minimum criteria will be judged unacceptable.

## **COMPARATIVE EVALUATION CRITERIA**

The following grading system will be used to measure the relative merits of each proposal, which has met the above minimum evaluation criteria.

<b>Criteria</b>	<b>Maximum Grades</b>
1. Quality of reports	3
2. References	5
3. Oral presentation and interview	9
4. Years the firm has been in business	3
5. Years of experience of project leader	3
6. Number of Municipal clients	2
Total (maximum)	25

- 1. Quality of Reports:** Submit at least two reports that have been provided to clients covering other types of municipal collection options including estimates during the past ten years.

The reports will be graded for...

- Clarity and organization
- Substance
- Clear final conclusions

Grading from 0 to 3 as follows...

- 3 All criteria listed above are positive
- 2 Two of the criteria listed above are positive
- 1 One of the criteria listed above is positive
- 0 None of the criteria listed above are positive

- 2. References:** Provide a list of references with names, addresses and telephone numbers for contact people in each case for relevant feasibility studies completed during the past 10 years.

The references will be graded for...

- Adherence to study timetable
- Quality and completeness of study
- Working relationship with Town Officials
- Accuracy of cost estimates
- Professionalism of designer personnel

Grading from 0 to 5 as follows...

- 5 All of the above criteria are positive
- 4 Four of the above criteria are positive
- 3 Three of the above criteria are positive
- 2 Two of the above criteria are positive
- 1 One of the above criteria is positive

- 3. Oral Presentation and/or Interview:** The Designer will be provided with the opportunity to make an oral presentation to the Selection Committee. In addition to presenting the organization and qualifications of the firm, the presentation should include information on past municipal engineering projects of a similar magnitude as described in Town's CWMP.

The oral presentation and interview will be graded for...

- A. Demonstrate an ability to undertake a comprehensive engineering evaluation of both types of collection options and varied treatment facilities.
- B. Provide an explanation of the engineering effort that will culminate with two comprehensive unit priced estimates.
- C. Explain how accuracy of project estimates is achieved.
- D. Describe the Firm's experience of similar engineering projects and/or studies.
- E. Present the qualifications of personnel who will complete the study including cost estimating personnel
- F. Describe the Town's required interface and how communication is maintained during the study
- G. Clarity and organization of presentation
- H. Innovation of presentation
- I. Visual Aids

Grading from 0 to 9 as follows...

- 9 All above criteria are positive
- 8 Eight of the above criteria are positive
- 7 Seven of the above criteria are positive
- 6 Six of above criteria are positive
- 5 Five of the above criteria are positive
- 4 Four of the above criteria are positive
- 3 Three of the above criteria are positive
- 2 Two of the above criteria are positive
- 1 One of the above criteria is positive
- 0 None of the above criteria are positive

- 4. Years Firm has been in Business:** Document the number of relevant years the firm has been in business.

Grading from 1 to 3 as follows...

- 3 Twenty five or more years in business
- 2 Sixteen to twenty four years in business
- 1 Ten to fifteen years in business

Note: Less than ten (10) years does not meet the minimum criteria.

- 5. Project team leader years of engineering experience:** Document the name of the Team Leader for this project if an award is made. Outline the experience and the number of years this leader has worked on similar municipal wastewater engineering projects which have been constructed.

Grading from 0 to 3 as follows...

- 3 More than twenty years of experience
- 2 Ten to twenty years of experience
- 1 Five to nine years of experience
- 0 Less than five years of experience

- 6. Number of municipal clients:** Provide evidence of clients within the United States for which the Designer has performed or has entered into a contract to perform engineering work for municipal wastewater projects similar to the magnitude described in the Orleans CWMP during the past twenty years.

Grading from 0 to 2 as follows...

- 2 Twenty or more Municipal Clients
- 1 Ten to Nineteen Municipal Clients
- 0 Less than ten Municipal Clients

**End of technical section.**