

# City of Milford



## AGENDA

Council Meeting

February 28, 2011

Milford City Hall - Joseph Ronnie Rogers Council Chambers - 201 South Walnut Street, Milford, Delaware

7:00 P.M.

### WORKSHOP

*Call to Order - Mayor Joseph Ronnie Rogers*

Carlisle Fire Company/Life Safety Rings Program/Follow Up

Review of Ordinance 2011-4/Chapter 174-Property Maintenance-Vegetable Gardens

Review of Ordinance 2011-5/Chapter 230/Outdoor Woodburning Furnaces

Review of Ordinance 2011-6/Chapter 230/Recreational Vehicles

*Adjourn*

### COUNCIL MEETING

*Call to Order - Mayor Joseph Ronnie Rogers*

*Invocation*

*Pledge of Allegiance*

*Recognition*

*Communications*

*New Business*

Approval for Mosquito Spraying Activities in City of Milford

Introduction of Ordinance 2011-3/Chapter 230/Zoning Code/Issuance of Licenses

Introduction of Ordinance 2011-7/Chapter 168/Peddling, Soliciting & Transient Merchants/Issuance of Licenses

Introduction of Ordinance 2011-8/Chapter 180/Residential Rental Operating License/Issuance of Licenses

Introduction of Ordinance 2011-9/Chapter 193/Solid Waste/Issuance of Licenses

Introduction of Ordinance 2011-10/Chapter 208/Teen Centers/Issuance of Licenses

FY2010-11 Budget Transfer/General Fund-Fund Balance/Live Near Your Work Program\*

*Unfinished Business*

Proposal-DBF/Wastewater Facilities Evaluation

Appointment of Economic Development Advisory Panel

*Executive Session -*

Pursuant to 29 Del. C. §10004(b)(2) Preliminary discussions on site acquisitions for any publicly funded capital improvements

Executive Session Matter

*Adjourn*

**SUPPORTING DOCUMENTS MUST BE SUBMITTED TO THE CITY CLERK IN ELECTRONIC FORMAT NO LATER THAN ONE WEEK PRIOR TO MEETING; NO PAPER DOCUMENTS WILL BE ACCEPTED OR DISTRIBUTED AFTER PACKET HAS BEEN POSTED ON THE CITY OF MILFORD WEBSITE.**

This agenda shall be subject to change to include additional items including executive sessions or the deletion of items including executive sessions which arise at the time of the public body's meeting.

**Carlisle Fire Company  
PO Box 292  
Milford, DE 19963**

**MISPILLION LIFE RING PROJECT**

**Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Organization:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Phone Number:** \_\_\_\_\_

My organization/business \_\_\_\_\_ would like to contribute \$ \_\_\_\_\_ to the Mispillion Life Ring Project sponsored by Carlisle Fire Company. We have made an additional contribution of \$ \_\_\_\_\_ to go in to the Dee'jion Fullman Scholarship fund. My Organization/ Business would like our Life Ring Station installed in the area of \_\_\_\_\_ along the Mispillion River Walk. My Organization/Business would like the plaque that will be installed along with our Life Ring Station to read;

\_\_\_\_\_  
\_\_\_\_\_

**The cost of the plaque will be the responsibility of your organization/business.  
Example of plaque;**

**This life ring station was donated by (your name) or your organization/Business.**

**The Carlisle Fire Company and the City Of Milford would like to thank you for your generous donation towards the Mispillion Life Ring Project. Without your contribution this project would not be successful.**

**Thank You,  
The Mispillion Life Ring Committee**

\_\_\_\_\_  
**(signature of your organization)    date**

\_\_\_\_\_  
**(committee member's signature)    date**

**PLEASE RETAIN A COPY OF THIS DONATION FOR YOUR RECORDS**

**Carlisle Fire Company  
PO Box 292  
Milford, DE 19963**

**MISPILLION LIFE RING PROJECT**

On August 16th, 2010, Dee'jion Fullman lost his life, simply trying to retrieve a basketball that had rolled in to the Mispillion River. Dee'jion went into the water to retrieve his basketball and never returned home to his family.

As a result of this tragedy, Carlisle Fire Company has formed The Mispillion Life Ring Committee to raise money and awareness regarding safety among our waterways in an effort to help preserve the life of our citizens. To accomplish this goal, Carlisle Fire Company would like to provide Life Ring Stations along the River Walk and areas of concern. The committee is also working to provide Water Safety Education Awareness to the citizens of Milford and the surrounding areas.

We would like to take this opportunity to ask your organization to contribute or sponsor a Life Ring Station. If your organization would like to sponsor a complete station, a plaque will be placed at that station, recognizing your organizations contribution. All additional contributions will go towards a one-time scholarship in the memory of Dee'jion Fullman, to be awarded to a student from his graduating class.

The cost of each Life Ring Station is as follows:

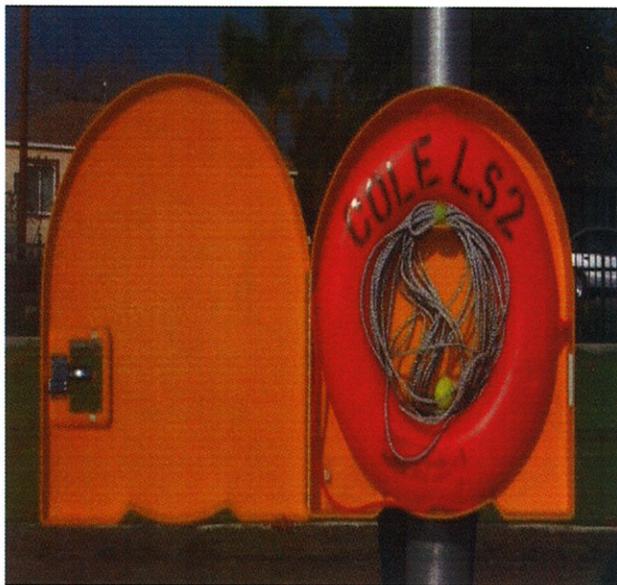
1- Life Ring Cabinet	
1-30 in. Life Ring	
90 ft. of throw line	\$368.00
Cabinet base (optonal)	\$ 97.00
1- Audible alarm	\$ 25.00
1- Plaque	\$
Shipping	<u>\$ 46.00</u>
Total	\$536.00

If you would like to donate to the project or sponsor a Life Ring Station make your check out to Carlisle Fire Company-Life Ring Project. The Mispillion Life Ring Committee will pick up your donation and take a picture of you and your organization with a Life Ring Station.

# LIFE RING STATIONS



EXAMPLE OF LIFE SAFETY RINGS TO BE INSTALLED IN COMMUNITY



PUBLIC NOTICE  
PLANNING COMMISSION & CITY COUNCIL PUBLIC HEARINGS  
City of Milford Property Maintenance Chapter Amendment  
Ordinance 2011-4

The following Ordinance is currently under review by Milford City Council:

The City of Milford hereby ordains as follows:

ORDINANCE 2011-4

Section 1.

An Ordinance to amend the Code of the City of Milford, Chapter 174, thereof, entitled, Property Maintenance, by defining and regulating Vegetable Gardens in the City of Milford, so as not to detract from the character of the existing neighborhood.

Section 2.

Amends §174.2 H, Definitions, (Section PM-202) by adding a definition to read as follows:

*VEGETABLE GARDEN-An area dedicated to the cultivation of edible plants. Most vegetable plants are annual in nature or grown as such, but there are some perennials (e.g., rhubarb, asparagus etc.) A vegetable garden can vary from strictly utilitarian to highly ornamental.*

Section 3.

Amends §174.2 , Additions, Insertions and Changes, by inserting a new Section “L” regulating the location of a vegetable garden, to read as follows:

*Section PM 302.11. Vegetable Garden. No vegetable garden shall extend beyond the back line of the house or structure toward the front of the house or structure. For corner lots, vegetable gardens must be in the rear yard on the side furthest from the side street not to extend beyond the side line of the house closest to the side street.*

Section 4.

Amends §174.2 , Additions, Insertions and Changes, by renumbering successive sections as follows:

Renumbering existing Section L to M.

Renumbering existing Section M to N.

Renumbering existing Section N to O.

Renumbering existing Section O to P.

Section 5. Dates.

Introduction to City Council: 02/14/11

Workshop Review: 02/28/11

Projected Adoption Date: 03/14/11

Ordinance becomes effective ten days following adoption date by City Council.

A complete copy of the Code of the City of Milford is available by request through the City Clerk’s Office or by accessing the website [cityofmilford.com](http://cityofmilford.com). Questions should be referred to Building Inspector Don Williams at 302-424-3712 Extension 313.

By: Terri K. Hudson, CMC

February 22, 2011

Milford City Council Members  
City Hall  
201 S. Walnut Street  
Milford, DE 19963

Dear Council Members;

By way of introduction: I am an avid gardener, a Master Gardener and a member of the Milford Garden Club. I purchased my home here for the sole purpose of gardening. Otherwise I would be living in a rental unit somewhere.

So with that in mind, the purpose of this letter is two-fold:

First, I wish to commend and thank you for your solution to handling yard waste under the new State legislation by having routine collections. While I compost some things, I greatly appreciate not having to bag and haul the rest. So thank you for that.

Second, I am deeply concerned about your proposed ordinance regarding vegetable gardens. Surely it is not your intension to prevent your constituents from having vegetable gardens. But that is what this ordinance will do. In my case, my back yard is too shady to support growing vegetables. I'm sure you don't expect me to cut down my trees.

I share your concern for the appearance of our city. But surely there must be alternative ways of protecting our appearance without restricting the location of our vegetable gardens. They don't have to be unattractive. (Even the White House has theirs on the south lawn. See the enclosed photo.) I have constructed raised boxes and placed them along the narrow side of my driveway, providing a neat and orderly environment for my veggies. I always include flowers, both in and around my boxes. Companion planting, as with marigolds, is not only pretty, but good horticultural practice.

I find the wording of Section 2 ambiguous. What constitutes an 'area'? Is it as small as one plant or is there some unspecified square foot maximum? And what is 'dedicated'? My four foot square boxes also contain flowers, so they are not technically 'dedicated' to vegetables. Further, how will you enforce 'edible plants'? My dictionary defines 'edible' as anything fit to be eaten'. The flowers of many plants, such as those on Red-bud trees, day lilies and pansies, for example, are edible. Some of us have whole beds of just day lilies. Will they be relegated to the back yard, too? I incorporate parsley into my flower beds because, while I don't eat it, it provides food for the caterpillar stage of the black swallowtail butterfly. And don't we all enjoy butterflies in our yards? Will I still be allowed to do this? If this will not be acceptable, is someone going to be coming into our yards to inspect? And if it is acceptable, can't we then intersperse our vegetables with our ornamentals? Squash with roses... It doesn't seem to me that enacting this ordinance will insure the results you desire..

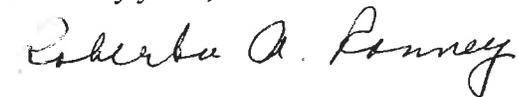
And then there is shrubbery that produces edible berries, such as blueberries, which feed both us and the birds, and which are also fabulous landscape plants as they turn brilliant red in the fall. And what about fruit trees? These all fall within your definition of 'an area dedicated to the cultivation of edible plants', and if you are going to enforce part of the Code, presumably you must enforce all of it.

At a time when food prices are skyrocketing and there is an increasing emphasis on eating healthy, home vegetable gardens are very important and should be encouraged. So I ask you to reconsider this proposed ordinance and preferably abandon it.

Personally, I don't grow vegetables that sprawl, I incorporate flowers, I share my bounty with neighbors, and I'll be happy to work with the City to insure my garden is not offensive. If you must proceed, please make some allowance for those of us with existing gardens and shady back yards.

Thank you for your consideration.

Sincerely yours,

A handwritten signature in cursive script that reads "Roberta A. Ranney". The signature is written in dark ink and is positioned below the typed name.

Roberta A. Ranney  
640 Beechwood Avenue  
Milford, De 19963

(302) 422-5364



## Ordinance 2011-5 (DRAFT)

NOW, THEREFORE, THE CITY OF MILFORD HEREBY ORDAINS:

ORDINANCE NO. 2011-5

Chapter 230: Zoning

It is generally recognized that the types of fuel used, and the scale and duration of burning by outdoor wood burning furnaces, creates noxious and hazardous smoke, soot, fumes, odors and air pollution, can be detrimental to citizens' health, and can deprive neighboring residents of the enjoyment of their property or premises. Therefore, with the adoption of this article, it is the intention of the City of Milford to establish and impose restrictions upon the construction and operation of outdoor wood burning furnaces within the limits of the city for the purpose of securing and promoting the public health, comfort, convenience, safety, welfare and prosperity of the city and its inhabitants.

Section 1.

An Ordinance to amend the Code of the City of Milford, Chapter 230, thereof, entitled, Zoning, by defining and regulating Outdoor Woodburning Furnace in the City of Milford.

Section 2.

Amends §230-4, Definitions, by adding a definition for Outdoor Woodburning Furnace.  
*OUTDOOR WOODBURNING FURNACE-An accessory structure, designed and intended, through the burning of wood, for the purpose of heating the principal structure or any other site, building, or structure on the premises.*

Section 3.

Amends §230-4, Definitions, by adding a definition for Firewood.  
*FIREWOOD-Trunks and branches of trees and bushes, but does not include leaves, needles, vines or brush smaller than three inches in diameter.*

Section 4.

Amends §230-4, Definitions, by adding a definition for Stack or Chimney.  
*STACK or CHIMNEY-Any vertical structure enclosing a flue or flues that carry off smoke or exhaust from a solid fuel fired heating device or structure, including that part of the structure extending above a roof.*

Section 5.

Amends §230-41, Accessory Uses, by adding a new paragraph (D) regulating Outdoor Wood Burning Furnace to read as follows:

*D. Outdoor Wood Burning Furnaces.*                    **OPTION SELECTION NEEDED**

*(1) Prohibited.*

*(A) The construction and operation of outdoor woodburning furnaces is hereby prohibited within the City of Milford.*

(2) Nonconforming Uses.

(A) Except as hereinafter provided, the lawful use of any outdoor woodburning furnace existing at the time of the adoption of this ordinance may continue though such use shall conform with the following provisions:

(1) Outdoor wood burning furnace existing at the time of the adoption of this article shall thereafter not be extended or enlarged.

(2) Any existing outdoor wood burning furnace which is abandoned or discontinued for a period of one year shall not be permitted to be reestablished as a nonconforming use, and must be immediately removed by the property owner from the subject premises.

(3) Permitted fuel. Only firewood and untreated lumber are permitted to be burned in any outdoor furnace.

(4) Spark arrestors. All outdoor furnaces shall be equipped with properly functioning spark arrestors.

(5) The use of such furnaces must follow all operating instructions supplied by the manufacturer.

**OR**

(1) Permitted.

(A) Minimum lot size. Outdoor furnaces shall only be permitted on lots of 3 acres or more.

(B) Setbacks. Outdoor furnaces shall be set back not less than 200 feet from the nearest lot line.

(C) Months of operation. Outdoor furnaces shall be operated only between October 1 and April 30.

(D) Spark arrestors. All outdoor furnaces shall be equipped with properly functioning spark arrestors.

(E) The unit must be located with due consideration to the prevailing wind direction.

(F) The use of such furnaces must follow all operating instructions supplied by the manufacturer.

(G) Permitted fuel. Only firewood and untreated lumber are permitted to be burned in any outdoor furnace.

(H) Building permit required prior to installation.

Section 6. Dates.

PUBLIC NOTICE  
PLANNING COMMISSION & CITY COUNCIL PUBLIC HEARINGS  
City of Milford Zoning Code Amendment  
Ordinance 2011-6

NOTICE IS HEREBY GIVEN the Planning Commission of the City of Milford will hold a Public Hearing on an amendment to the City of Milford Zoning Code on Tuesday, March 15, 2011 at 7:00 p.m.

A FINAL PUBLIC HEARING is scheduled on Monday, March 28, 2011 at 7:00 p.m. before Milford City Council. Following the hearing, Ordinance 2011-6 may be adopted, with or without amendments.

NOW, THEREFORE, THE CITY OF MILFORD HEREBY ORDAINS:

ORDINANCE NO. 2011-6

Chapter 230: Zoning

Section 1.

An Ordinance to amend the Code of the City of Milford, Chapter 230, thereof, entitled, Zoning, by defining and regulating Recreational Vehicles in the City of Milford.

Section 2.

Amends §230-4, Definitions, by adding a definition for Recreational Vehicle.

RECREATIONAL VEHICLE- Any vehicle used for recreational purposes, including but not limited to, antique or classic autos, drag or race cars, motorcycles, boats, boat trailers, jet skis, campers, camper trailers, motor\mobile homes, snowmobiles, ATVs, all-terrain vehicles and utility trailers.

Section 3.

Amends §230-4, Definitions, by adding a definition for Vehicle Height.

VEHICLE HEIGHT -- A vehicle height will be determined by measuring from the ground surface to the top of the vehicle, as stored.

Section 4.

Amends §230-4, Definitions, by adding a definition for Vehicle Length.

VEHICLE LENGTH -- A vehicle length will be determined by the physical measurement of the outside dimension of said vehicle, i.e., a boat will be measured from the bow to the stern, a camper/motor home will be measured from bumper to bumper, a utility trailer or camper trailer will be measured front to rear excluding the trailer tongue, a boat trailer will be measured from the rear to the point of the bow support excluding the tongue.

Section 5. Amends Article IV Off Street Parking and Loading, §230-20 General Provisions, by repealing Paragraph I and inserting a new Paragraph I to read as follows:

~~Boat, trailer, bus and van parking. In any residential district, no house trailer, camper, boat trailer, bus or boat shall be parked in the front yard. Parking is allowed in the side or rear yards~~

~~five feet from the property line if it does not take up space normally occupied by an automobile.~~

#### I. Storage of Recreational Vehicles.

- (1) One recreational vehicle, less than 9 feet in height and less than 20 feet in length may be stored in the driveway; however, it cannot utilize the required area designated for off street parking and no additional storage in the front yard is permitted.
- (2) A recreational vehicle may be stored in the side yard, provided that it shall:
  - (A) Be stored parallel to and adjacent to the structure;
  - (B) Not exceed the dimension of the structure plus 6 feet or a maximum of 35 feet, whichever is less;
  - (C) Be provided with either an evergreen screening or a solid fence 6 feet high, planted or installed between the vehicle and the property line. Plantings shall be planted a minimum of 4 feet high and be allowed to grow and be maintained to a minimum of 6 feet high; and
  - (D) Be set back a minimum of 5 feet from the side property line.
- (3) A recreational vehicle may be stored in the rear yard, provided that it shall:
  - (A) Be stored parallel to and adjacent to the structure;
  - (B) Not exceed the dimension of the structure plus 6 feet or a maximum of 35 feet, whichever is less;
  - (C) Be provided with either an evergreen screening or a solid fence 6 feet high, planted or installed between the vehicle and the property line. Plantings shall be planted a minimum of 4 feet high and be allowed to grow and be maintained to a minimum of 6 feet high; and
  - (D) Be set back a minimum of 5 feet from the rear property line.
- (4) A maximum of two recreational vehicles may be stored outside of a building on any lot containing a dwelling unit. Only one such vehicle may be equal to or greater than 9 feet in height or 20 feet in length. Such vehicles must be owned or leased by the property owner or the property tenant, except that on lots of 5 acres or larger, the option shall exist that both of the two allowed recreational vehicles may be equal to or greater than 9 feet in height or 20 feet in length.
- (5) No camper, motor home or camper trailer shall be used for residential purposes, except that visitors with such vehicles may sleep in them for a period not to exceed two weeks in a calendar year.
- (6) All parking areas must have a minimum parking surface of gravel, extending two feet around the perimeter of the vehicle and be free from all vegetation.
- (7) Recreational vehicles must be maintained in a clean, well-kept state, including but not limited to, operable motors, engines, equipment and maintain its original design.
- (8) All recreational vehicles/trailers that require tags or registration must be kept current and visible at all times.

#### Section 6. Dates.

Introduction to City Council: 02/14/11

Planning Commission Hearing: 03/15/11

City Council Hearing: 03/28/11

Projected Adoption Date: 03/28/11

Ordinance becomes effective ten days following adoption date by City Council.

Both hearings will be held in the Joseph Ronnie Rogers Council Chambers at Milford City Hall, 201 South Walnut Street, Milford, Delaware.

The public is invited to attend and encouraged to comment on the amendment to the Zoning Code. If unable to attend, written comments will be accepted but must be submitted to the City Clerk's Office one week prior to the hearing.

A complete copy of the Code of the City of Milford is available by request through the City Clerk's Office or by accessing the website [cityofmilford.com](http://cityofmilford.com).

By: Terri K. Hudson, CMC



STATE OF DELAWARE  
DEPARTMENT OF NATURAL RESOURCES  
& ENVIRONMENTAL CONTROL  
DIVISION OF FISH & WILDLIFE  
89 Kings Highway  
Dover, Delaware 19901

OFFICE OF THE  
DIRECTOR

February 7, 2011

**City of Milford  
P.O. Box 159  
201 S. Walnut Street  
Milford, DE 19963**

**Re: Do you want State Mosquito Control services in your city/town next year?**

Dear Sir or Madam:

It's now time for you to think about the start of another mosquito control season, involving our program now inquiring about whether your city or town might again want to receive (or might newly want to receive) the State's mosquito control services for the upcoming year (2011). By mid-March, 2011 the **Delaware Mosquito Control Section** will once again start its statewide spring woodland control program (to control larval mosquitoes breeding in wet woodlands). We'll then be performing from early April into early November our usual range of other statewide efforts to control these pests and health menaces, which can originate from coastal tidal marshes, freshwater wetlands, and within developed or domestic settings. As such, **we now want to know if your city or town wants to participate in our control program for the upcoming year**, and to receive at no cost to your municipality the State's mosquito control services.

**Potential problems if for some reason you choose not to sign up**

In addition to our usual concern for mosquito nuisance problems and their quality-of-life and economic impacts, plus our traditional concern for possible transmission to humans or horses of highly virulent Eastern Equine Encephalitis (EEE), this upcoming season also carries the specter for the quite probable continued occurrence of a relatively new mosquito-borne disease problem given much publicity over the past several years, being West Nile Encephalitis (WNE). While WNE might not be as sickening or deadly a problem as EEE, it will probably more frequently occur, and still be quite problematic for some people who contract this virus.

It's important to understand that if at this time your municipality chooses not to participate in the Section's program, then in event of your sudden change of mind, perhaps due to intolerable nuisance or disease problems sometime during the upcoming year, the Section might *not* be able to take control actions until all the agreements and procedures contained herein are fulfilled by your city or town. This can then slow down or even preclude the Section's ability to take or deliver timely response actions.

*Delaware's good nature depends on you!*

### What you need to do to participate

In order to best serve the public, the Delaware Department of Natural Resources and Environmental Control (DNREC) has developed and adopted the enclosed **Mosquito Control Spray Policy** to govern applications of insecticides, with particular emphasis on the spraying of aerially- or ground-applied adulticides (insecticides to kill adult mosquitoes), and to a lesser degree for aerially-applied larvicides (insecticides to kill immature mosquitoes in their aquatic stages), within incorporated cities or towns. The Spray Policy requires annual consent by municipalities before the Section will undertake certain types of needed insecticide spraying within a city or town's jurisdictional boundaries; provides for contact persons to represent both the municipality and the State; allows through a municipality's own devices for identification of "No-spray zones" for adulticides (if any); and addresses mosquito control in event of a declared public health emergency. This annual consent can be indicated by completing and returning to the Section the enclosed "**Municipality Endorsement**" form. There is also the option on the endorsement form to indicate that your city or town does not wish to participate. We would greatly appreciate your returning the endorsement form in either case. Without receiving the endorsement signed in some manner by the time requested, the Section will assume that your city or town does **not** wish to participate in the upcoming year's control program.

Please note that just by your signing and returning the Municipality Endorsement form it does **not** mean that you then automatically receive **all** of our mosquito control services whenever needed without any further actions on your part. Converse to this and as a specific exception (exclusive of a public health emergency that Mosquito Control might recognize), and as described in our Spray Policy (see Section III-4 on page 5), **each and every time** that you want Mosquito Control to undertake any adulticide spraying (to control adult mosquitoes), done by us either via ground-based or aerial applications within or over areas in your municipality's jurisdiction, **your municipality's designated Mosquito Control contact person** (as you will have indicated on the Municipality Endorsement form, or alternatively it could be some other appropriate city or town official) **must contact the Mosquito Control Section and request such adulticiding**. Please note that there can be occasions when we might recommend to your city or town that such type of spraying be undertaken (based on technical information that our program collects), and whereby we advise you that your municipality then officially requests that we take such spray actions. However, in many instances it will be more a matter of your first contacting us on an **event-by-event** basis that you want Mosquito Control to adulticide (which could be determined by your municipality as being necessary or desirable for us to undertake via several avenues, such as your hearing from your citizens or constituents about intolerable local mosquito infestations, or by other means or devices that your city or town might have at your disposal).

The Mosquito Control Section also requires all participating municipalities **to prepare and sign a waiver on official city or town letterhead stationery** permitting spray application by low-flying aircraft, in order to comply with Federal Aviation Administration (FAA) regulations. Additionally, we have included a map of your city or town's area that was made from a pertinent section(s) of a USGS 7-1/2" topographic map(s), **for your municipality to delineate its current incorporated boundaries**; and for you **to also indicate and delineate requests for adulticide No-spray Zones (if any)** in regard to adulticide aerial spraying, adulticide ground spraying, or both.

### Information about the products we use

**MUNICIPALITY ENDORSEMENT**

**MOSQUITO CONTROL SPRAY POLICY**

A. I hereby certify that the City or Town of \_\_\_\_\_ has received from the Delaware Mosquito Control Section (DNREC) for the year **2011** a copy of the Mosquito Control Spray Policy, as well as directions for how to electronically access an e-file of product labels and Material Safety Data Sheets for the insecticides mentioned in the Spray Policy.

B. On behalf of the City or Town in regard to participating in and permitting the Section's mosquito control spray activities to occur this year (from March through mid-November) within our jurisdictional boundaries: (please check one):

\_\_\_\_\_ I agree to allow the Mosquito Control Section to undertake its spraying activities within the city or town, to be done in adherence to and per provisions of the Mosquito Control Spray Policy.

OR

\_\_\_\_\_ I do not request the Section's mosquito control spray services this year within city or town boundaries.

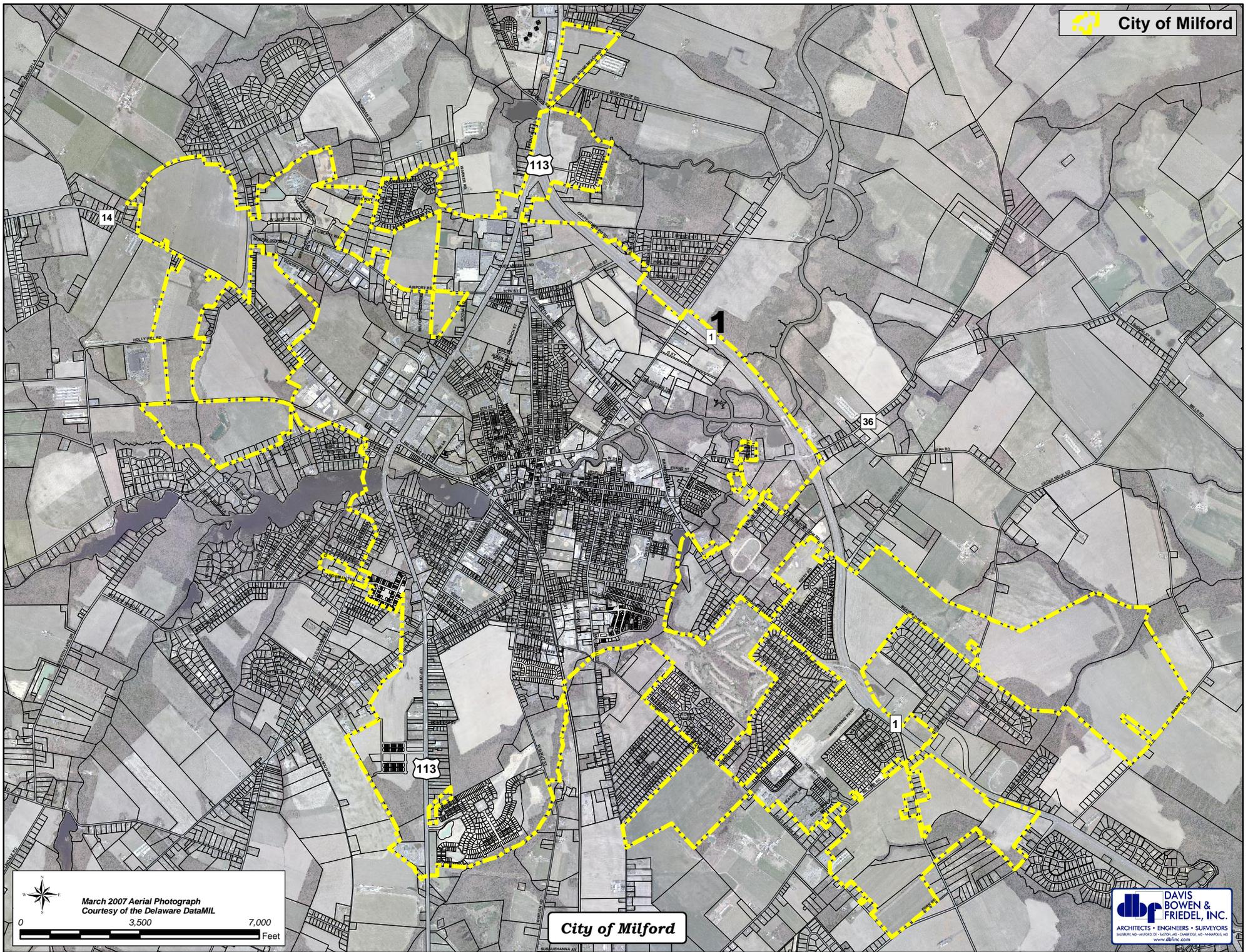
C. In event of agreeing to participate and permit mosquito control activities within the city or town, I have enclosed: 1) a USGS topographic map showing the municipal boundaries, as well as identifying and delineating on the map No-spray zones (if any); 2) a signed waiver prepared on official city or town letterhead permitting spray applications by low-flying aircraft.

D. In event of agreeing to participate and permit mosquito control spraying within the city or town, the municipal contact person is \_\_\_\_\_ at phone number \_\_\_\_\_. As a second municipal contact, his/her alternate is \_\_\_\_\_ at phone number \_\_\_\_\_. The fax number for our municipality is \_\_\_\_\_.

\_\_\_\_\_  
(Signature of city/town official)

\_\_\_\_\_  
(Title of city/town official)

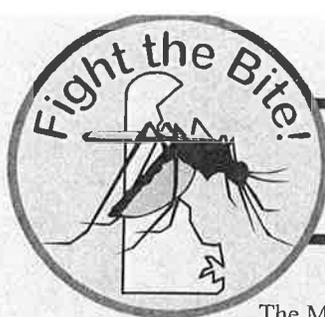
\_\_\_\_\_  
(Date)



  
March 2007 Aerial Photograph  
Courtesy of the Delaware DataMIL  
0 3,500 7,000  
Feet

**City of Milford**

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# Mosquito Control in Delaware

The Mosquito Control Section of the Department of Natural Resources and Environmental Control's Division of Fish and Wildlife is the agency responsible for reducing mosquito populations in Delaware without adversely affecting human health or the environment. Currently the Section maintains operational offices in Newark and Milford.

The Mosquito Control Section utilizes an Integrated Pest Management program which combines chemical, biological, and physical control measures. Control of larvae is usually more effective than widespread adult control since the larvae are concentrated in smaller, well-defined aquatic habitats. Biological control of larvae is best achieved through water management projects which provide mosquito consuming fish access to mosquito breeding sites. If larval control methods are successful, the need for adult control is greatly reduced or eliminated.

Mosquito nuisance levels are monitored via public complaints, field inspections, and automated traps. Control measures are initiated when mosquito populations reach nuisance levels or mosquito-transmitted diseases are detected. Blood or tissue samples are taken from caged chickens exposed to biting mosquitoes and specific species of dead wild birds (contact Mosquito Control for the current list of accepted species) to determine the presence of viral organisms which can be transmitted to humans or animals

by the bite of mosquitoes.

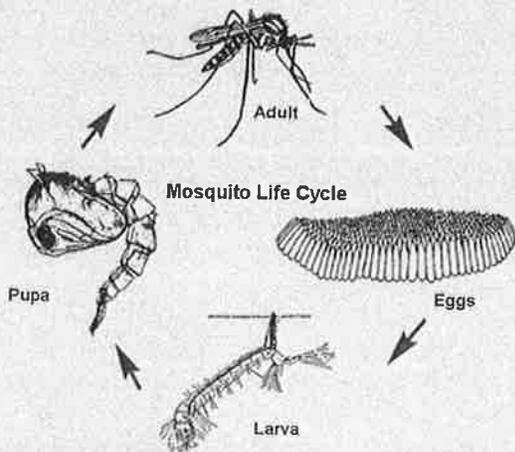
Insecticides are strategically applied using ground or aerial equipment to control adult or larval (immature) mosquitoes. All insecticides used by the Mosquito Control Section are registered by the Environmental Protection Agency (EPA) for mosquito control and applied according to EPA approved label instructions. The EPA has determined that these products can be used without posing unreasonable risks to human health, wildlife, or the environment.

The following topics are discussed in detail:

- **Mosquito Biology** - life cycle and habitats of mosquitoes
- **Mosquito Sampling Programs** - techniques used to measure mosquito abundance and the presence of mosquito transmitted diseases
- **Mosquito Control with Insecticides** - types of insecticides used to control mosquitoes
- **Biological Mosquito Control Using Water Management** - reducing larval mosquito populations using water management techniques which promote natural mosquito control

## Mosquito Biology

Mosquitoes are a diverse group of insects closely related to flies, with at least 57 mosquito species occurring in Delaware. Male and female mosquitoes feed mainly on flower nectar for energy. Only female mosquitoes bite,



*Mosquito life cycle—Clockwise from right—egg raft on water surface, larva, pupa, and adult. Some species lay their eggs on standing water, while other species lay eggs on moist mud. (Image used with permission from Ohio State University Extension.)*

drawing blood with piercing and sucking mouthparts to enable egg production. Most species are fairly specific in their biting preferences (e.g., some bite only amphibians, some only birds, while others only mammals such as horses or humans) and some will feed on a combination of animals.

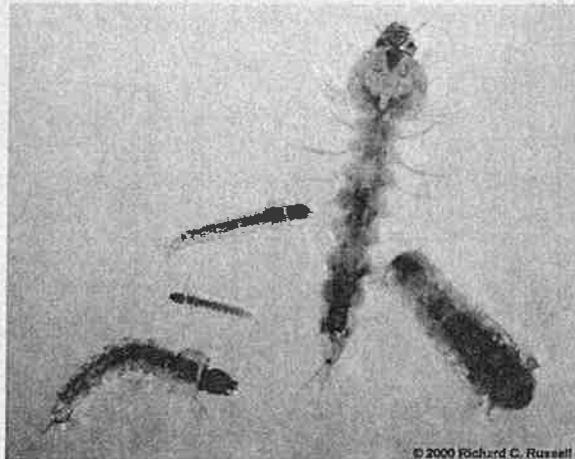
All mosquito species require water to complete their life cycles from egg to adult. All life stages except the adult are aquatic. Eggs are deposited on water or on moist soil near water. Eggs deposited on moist soil hatch when flooded by water. Mosquitoes develop through four larval stages, progress to a pupal stage (the final stage before adult emergence), and finally emerge as adults. The process from egg to adult can take as little as five days during hot weather and up to as long as a month or more in cool weather. The mosquito season in Delaware starts in March and can extend through November, with adults most abundant from April through September. Some species can produce 10 generations per year.

Mosquitoes utilize a wide variety of aquatic habitats as breeding sites, with individual species usually restricted to a specific habitat. Stagnant water isolated from mosquito predators is ideal breeding habitat. Salt and fresh water marshes, flooded woodlands, and various habitat associated with human occupation (e.g., old tires, clogged rain gutters, and blocked drainage ditches) are the principle mosquito breeding habitats in Delaware. Each habitat produces a

unique group of mosquito species.

Variations in rainfall patterns influence mosquito population levels. Mosquitoes which deposit eggs directly on water (e.g., *Culex* and *Anopheles* species) are most abundant after periods of high rainfall. Rainfall also affects quantities of floodwater species on fresh water marshes. The abundance of the saltmarsh mosquito (*Aedes sollicitans*) is dependent on both tidal flooding and rainfall patterns. Saltmarsh mosquito populations are lowest when weather or astronomical conditions prevent flooding of high marsh areas where eggs have been deposited. The greatest production occurs when rainfall or higher than normal tides flood high areas of the salt marsh after a dry period.

Some mosquito species remain close to their breeding areas after emerging as adults while others, such as the saltmarsh mosquito, can fly up to 40 miles from their larval development areas.



*Larval instars—four larval instars (growth stages) are represented above along with the final stage, the pupa (on right).* (Image used with permission from The Department of Medical Entomology <http://medent.usyd.edu.au>.)

## Mosquito Sampling Programs

Accurate monitoring of mosquito population levels is essential to the timely and effective control of mosquito outbreaks. Vigilant sampling of larval (immature) mosquito populations provides data which assist in timing insecticide applications to control larvae before emergence as biting adults. Information on larval densities, age, species, and percent of the area breeding mosquitoes is used in determining where and when insecticide treatment is required. Estimates of adult female mosquito abundance are made by counting the number of mosquitoes landing on Mosquito Control inspectors during one minute. Automated light traps which attract and collect adult mosquitoes are also utilized throughout the state to determine levels of adult mosquito infestation. Chemical control measures are initiated when sampling indicates high populations of adult mosquitoes known to bite humans.

In addition to measuring mosquito nuisance levels, the Mosquito Control Section also monitors for the presence of diseases which can be transmitted by mosquitoes to humans or animals. Of primary concern are Eastern Equine

Encephalitis (EEE) and West Nile virus (WNV), both potentially deadly viruses which infect the brain of susceptible birds and mammals (e.g., horses and humans). Within the human population, the elderly are the most at risk. Mosquitoes contract both viruses by feeding on an infected wild bird and later transmit the virus while feeding on another animal.



*A "New Jersey" style light trap for monitoring adult mosquitoes. A light to attract the mosquitoes is under the funnel and a fan near the top directs mosquitoes into a collection jar at the bottom.*

EEE and WNV levels are monitored by Mosquito Control using several techniques. In June, caged chickens are distributed throughout the state and exposed to biting mosquitoes for the purpose of disease surveillance. These sentinel flocks remain in the field until early November. Weekly blood samples are collected from the chickens and analyzed for the presence of EEE and/or WNV by the Division of Public Health laboratory. Certain species of dead wild birds are also tested for WNV. Mosquito species known to transmit these viruses are sometimes analyzed as well. When Mosquito Control's monitoring programs document the presence of EEE and WNV, control measures are initiated in order to minimize the chance of human infection. Horses can be protected from both viruses with vigilant vaccination.

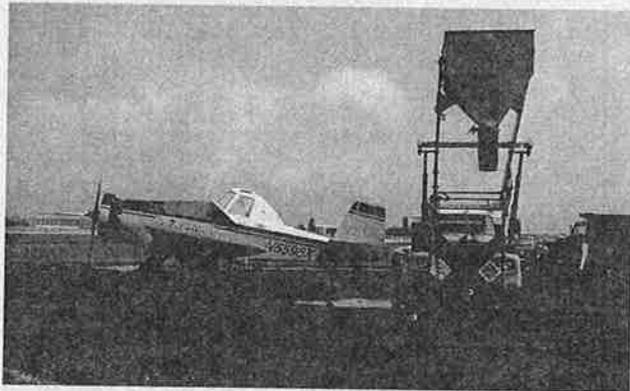
Canine heartworm, a disease fatal to dogs, is circulated within the dog population by biting mosquitoes. The Mosquito Control Section does not monitor heartworm levels in the mosquito population. Dog owners are encouraged to protect their pets from heartworm by administering preventative medications year-round.

## Mosquito Control with Insecticides

Insecticides used for mosquito control are grouped into two categories. Larvicides are used in aquatic habitats to control immature (larval) mosquitoes. Adulticides are applied to the air to control adult mosquitoes. All insecticides used by Mosquito Control are registered by the U.S. Environmental Protection Agency and pose no unreasonable risk to human health, wildlife, or the environment when used as directed.

Larviciding is the most efficient and effective method of controlling mosquitoes since the larvae are concentrated in relatively small breeding areas. Larvicides are applied to primary mosquito breeding habitats within Delaware before the larvae emerge as adults. The primary breeding habitats found in Delaware are salt marshes, fresh water wetlands,

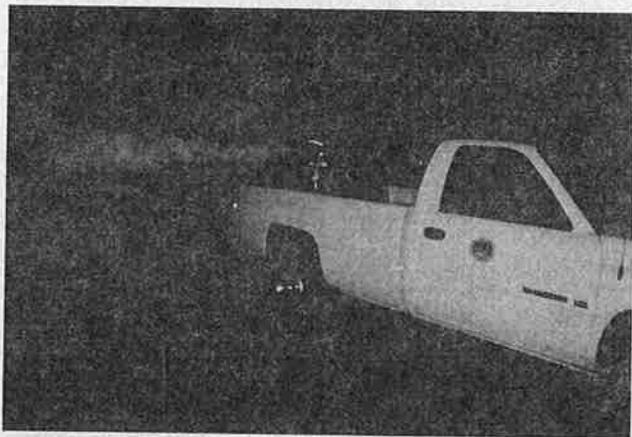
wet woodlands, and roadside ditches. Larviciding is accomplished in small areas using hand-held or truck-mounted equipment. Larger tracts of land are treated using helicopters or airplanes. Methoprene, Bti, and temephos are currently the principle larvicides used by Mosquito Control. These products are environmentally compatible due to the rapid "breakdown" of the product.



*Fixed-wing aircraft are used to apply insecticides when vast expanses of marsh, woods, or developed areas need treatment.*

Control of adult mosquitoes becomes necessary if larviciding is ineffective or not accomplished due to weather. Truck-mounted "foggers" are used to apply adulticides in relatively small areas such as housing developments. Airplanes are used to apply adulticides over large areas such as towns or rural areas when necessary.

The adulticide compounds currently used in Delaware are naled and synthetic pyrethroids. These products are short-lived and must be reapplied for each adult mosquito infestation. Adulticiding is generally more costly than larviciding because adulticide applications are usually performed over larger areas.



*Adulticides are applied by a truck-mounted "fogger" in residential areas.*

The Mosquito Control Section evaluates new mosquito control insecticides as they become available. New products must provide consistent control of mosquitoes, be environmentally compatible, non-hazardous to humans, and cost effective. If new products meet these requirements, they are considered for possible use by the Section in its battle against mosquitoes in Delaware.



*Helicopters are used to apply insecticides when small or localized areas must be treated. They are also a valuable tool for checking remote suspected mosquito breeding areas.*

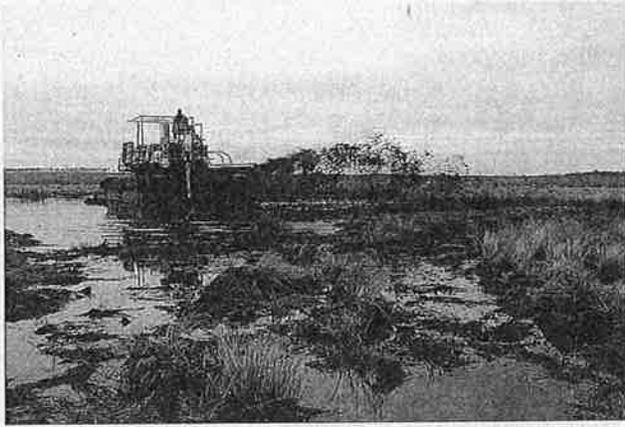
## Biological Mosquito Control Using Water Management

Biological control is a natural form of pest control. The Mosquito Control Section enhances the biological control of larval mosquitoes by installing water management systems in mosquito breeding areas. Mosquito Control uses water management systems to manipulate water levels in order to interrupt mosquito life cycles before the larvae emerge as adults. Water management systems control mosquitoes by altering mosquito breeding sites so they are unsuitable for egg and larval development and/or by providing access for larvae-consuming fish to mosquito breeding sites. Mosquito fish (*Gambusia holbrooki*) readily consume mosquito larvae and can sometimes be stocked and established in areas that have low predatory fish populations. Biological control provides more permanent mosquito control than chemical insecticides, resulting in a substantial reduction in insecticide applications and costs. Water management projects are a part of the Mosquito Control Section's Integrated Pest Management (IPM) program. The IPM program utilizes a combination of mosquito control methods resulting in effective and efficient mosquito control operations.



*Saltmarsh killifish are natural predators of mosquito larvae. They are abundant in tidal wetlands, but access to mosquito breeding locations is often restricted.*

Each type of mosquito breeding area requires specialized water management techniques. Open Marsh Water Management (OMWM) is the preferred technique in salt marshes and involves selective excavation of ponds and ditches in mosquito breeding areas. Mosquito control is achieved in OMWM treated areas by modifying mosquito



*The amphibious rotary excavator is used to selectively create ponds and ditches in salt marshes for biological mosquito control. Broadcasting of spoil over the marsh surface as a thin slurry permits rapid re-growth of the original vegetation.*

breeding sites and by providing predatory fish access to mosquito breeding areas. Marsh areas treated with OMWM can control mosquito larvae for 15 or more years. OMWM treated areas also provide new habitats for a variety of fish and wildlife species.

Impoundments are another water management technique that have been used to lessen mosquito production in marsh areas. Impoundments are created by enclosing marsh areas with an elevated, earthen dike or levee. A water control structure is often installed in this dike to allow for manipulation of the water level within the impoundment. Floodwater mosquito production can be largely reduced by permanently flooding the impounded area thus making it unsuitable egg-laying habitat for floodwater mosquito species. Mosquitoes which deposit their eggs on the water surface can be controlled by fish living within the impoundment. While new impoundments are currently not being constructed, existing impoundments are being managed to control mosquitoes and to benefit many fish and wildlife species.

Individual homeowners can assist the Mosquito Control Section by eliminating mosquito breeding sites around the home which retain rainwater (e.g., clogged rain gutters, discarded tires, abandoned containers, and neglected bird baths). Concerns regarding persistent wet areas on property should be directed to appropriate drainage agencies.



*Man-made containers that hold water, such as discarded tires, create prime mosquito breeding habitat.*

## Checklist of Possible Mosquito Sources Around the Home:

### *Sources and remedies*

- **Ornamental ponds** - stock with fish, remove excess emergent vegetation
- **Swimming pools** - remove water from pool cover, keep chlorinated and filtered
- **Bird baths** - change water once a week
- **Rain gutters** - keep clear of debris so that water can drain
- **Containers** - remove, cover, invert, or dump regularly

It can take less than one week for mosquitoes to complete their life cycle; therefore water must be removed or changed weekly.

Other examples of typical items around the yard that easily collect water include the following: wheel barrows, flower pots, tires, buckets, toys, boats, tarps, pet dishes, troughs, trash cans and lids, children's wading pools, and lawn ornaments.

You can protect your family and neighbors from pesky mosquitoes and potential mosquito-borne diseases by diligently monitoring these items. Container breeding species do not fly far and can be the source of mosquitoes for an entire neighborhood.

## Personal Protection Measures

- Apply repellent containing DEET according to the label's directions.
- Wear long-sleeved shirts and long pants.
- Avoid being outdoors during peak mosquito activity (from dusk to dawn).
- Ensure that all window and door screens are secure and functional.

### **For additional information contact:**

Mosquito Control Section  
Delaware Division of Fish & Wildlife  
89 Kings Highway  
Dover, DE 19901

### **Telephone:**

New Castle County - (302) 836-2555  
Kent & Sussex Counties - (302) 422-1512

### **Visit our website at:**

[www.dnrec.state.de.us/fw/mosquito.htm](http://www.dnrec.state.de.us/fw/mosquito.htm)



PUBLIC NOTICE  
PLANNING COMMISSION & CITY COUNCIL PUBLIC HEARINGS  
City of Milford Zoning Code Amendment  
Ordinance 2011-3

NOTICE IS HEREBY GIVEN the Planning Commission of the City of Milford will hold a Public Hearing on an amendment to the City of Milford Zoning Code on Tuesday, March 15, 2011 at 7:00 p.m.

A FINAL PUBLIC HEARING is scheduled on Monday, March 28, 2011 at 7:00 p.m. before Milford City Council. Following the hearing, Ordinance 2011-3 may be adopted, with or without amendments.

NOW, THEREFORE, THE CITY OF MILFORD HEREBY ORDAINS:

ORDINANCE NO. 2011-3

Chapter 230: Zoning

Section 1. An Ordinance to Amend the Code of the City of Milford, Chapter 230, thereof, entitled Zoning, by requiring that all fees due the City of Milford are paid and in good standing before a license can be issued.

Section 2. Article XIII Permits and Certificates, §230-62 Application and Issuance, Paragraph D, is hereby amended by inserting the word "LICENSES" after certificates of occupancy and before building permits, to read as follows:

D. No zoning permits, certificates of occupancy, LICENSES or building permits shall be issued nor shall any applications for changes of zoning, conditional uses, variances or special exceptions be accepted unless all taxes, assessments, sewer, water, electric, trash charges and any other fees due the City are paid and in good standing.

Section 3. Dates.

Introduction by City Council: 02/28/11

Planning Commission Hearing: 03/15/11

City Council Public Hearing & Review: 03/28/11

Projected Adoption Date: 04/11/11

Ordinances become effective ten days following their adoption.

Both the Planning Commission and City Council Public Hearings will be held in the Council Chambers at Milford City Hall, 201 South Walnut Street, Milford, Delaware.

The public is invited to attend and encouraged to comment on the amendment to the Zoning Code. If unable to attend, written comments will be accepted up to one week prior to hearings.

A complete copy of the Code of the City of Milford is available by request through the City Clerk's Office at Milford City Hall, 201 S. Walnut Street, Milford, DE 19963 or by accessing its website at [cityofmilford.com](http://cityofmilford.com)

By: Terri K. Hudson, CMC  
City Clerk

## PUBLIC NOTICE

### City of Milford Peddling, Soliciting and Transient Merchants Code Amendment Ordinance 2011-7

The following ordinance is currently under review by Milford City Council:

NOW, THEREFORE, THE CITY OF MILFORD HEREBY ORDAINS:

ORDINANCE NO. 2011-7

Chapter 168: Peddling, Soliciting and Transient Merchants.

§168-5. Issuance of license or permit; list of vendors.

Section 1. An Ordinance to Amend the Code of the City of Milford, Chapter 168, thereof, entitled Peddling, Soliciting and Transient Merchants, by requiring that all fees due the City of Milford are paid and in good standing before a license or permit can be issued.

Section 2. Section 168-5(A) "Issuance of license or permit; list of vendors" is hereby amended by adding a new sub-paragraph §168-5(A)(1) to read as follows:

*(1) No license or permit shall be issued to any person or business unless all taxes, assessments, sewer, water, electric, trash charges and any other fees due the City are paid and in good standing.*

Section 3. Dates.

Introduction & Review by City Council: 02/28/11

Workshop Review: 03/28/11

Projected Adoption Date: 04/11/11

This ordinance will become effective ten days following its adoption.

A complete copy of the Code of the City of Milford is available by request through the City Clerk's Office at Milford City Hall, 201 S. Walnut Street, Milford, DE 19963 or by accessing its website at [cityofmilford.com](http://cityofmilford.com)

By: Terri K. Hudson, CMC  
City Clerk

**PUBLIC NOTICE**  
City of Milford Residential Rental Operating Code Amendment  
Ordinance 2011-8

The following ordinance is currently under review by Milford City Council:

NOW, THEREFORE, THE CITY OF MILFORD HEREBY ORDAINS:

ORDINANCE NO. 2011-8

Chapter 180: Residential Rental Operating License.

§180-7. Regulation for Issuance of Licenses.

Section 1. An Ordinance to Amend the Code of the City of Milford, Chapter 180, thereof, entitled Residential Rental Operating License, by requiring that all fees due the City of Milford are paid and in good standing before a license can be issued.

Section 2. Existing Paragraph E of Section 180-7 “Regulations for Issuance of Licenses“ is hereby renumbered as Paragraph F.

Section 3. A new Paragraph E shall be added to Section 180-7 “Regulations for Issuance of Licenses“ to read as follows:

(E) No license shall be issued to any person or business unless all taxes, assessments, sewer, water, electric, trash charges and any other fees due the City are paid and in good standing.

Section 4. Dates.

Introduction & Review by City Council: 02/28/11

Workshop Review: 03/28/11

Projected Adoption Date: 04/11/11

This ordinance will become effective ten days following its adoption.

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By: Terri K. Hudson, CMC  
City Clerk

**PUBLIC NOTICE**  
City of Milford Solid Waste Code Amendment  
Ordinance 2011-9

The following ordinance is currently under review by Milford City Council:

NOW, THEREFORE, THE CITY OF MILFORD HEREBY ORDAINS:

ORDINANCE NO. 2011-9

Chapter 193. Solid Waste.

Article I. Collection and Disposal.

§193-6: Commercial Hauling of Solid Waste.

Section 1. An Ordinance to Amend the Code of the City of Milford, Chapter 193, thereof, entitled Solid Waste, by requiring that all fees due the City of Milford are paid and in good standing before a license can be issued to a commercial hauler.

Section 2. Section 193-6(B) is hereby amended by adding a new sub-paragraph §193-6(B)(1) to read as follows:

*(1) No license or permit shall be issued to any person or business unless all taxes, assessments, sewer, water, electric, trash charges and any other fees due the City are paid and in good standing.*

Section 3. Dates.

Introduction & Review by City Council: 02/28/11

Workshop Review: 03/28/11

Projected Adoption Date: 04/11/11

This ordinance will become effective ten days following its adoption.

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By: Terri K. Hudson, CMC  
City Clerk

**PUBLIC NOTICE**  
City of Milford Teen Center Ordinance Amendment  
Ordinance 2011-10

The following ordinance is currently under review by Milford City Council:

NOW, THEREFORE, THE CITY OF MILFORD HEREBY ORDAINS:

ORDINANCE NO. 2011-10

Chapter 208: Teen Centers.

§208-1. License Required.

Section 1. An Ordinance to Amend the Code of the City of Milford, Chapter 208, thereof, entitled Teen Centers, by requiring that all fees due the City of Milford are paid and in good standing before a license can be issued by the City Code Official.

Section 2. Existing Section 208-1 is hereby renumbered as Section 208-1, Paragraph A, by removing and inserting text to read as follows:

A. Whoever operates, as a commercial venture, a teen center or place of amusement or dance hall catering solely or primarily to the teenage trade, shall first obtain a license FROM THE CITY CODE OFFICIAL ~~to do so~~ as provided ~~under~~ in this chapter.

Section 3. A new Paragraph B will be added to Section 208-1, to read as follows:

(B) No license shall be issued to any person or business unless all taxes, assessments, sewer, water, electric, trash charges and any other fees due the City are paid and in good standing.

Section 4. Dates.

Introduction & Review by City Council: 02/28/11

Workshop Review: 03/28/11

Projected Adoption Date: 04/11/11

This ordinance will become effective ten days following its adoption.

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By: Terri K. Hudson, CMC  
City Clerk

FY2010-11 Budget Adjustment

Transfer \$1,000 from General Fund/Fund Balance 101-0000-399-10-00 to pay For the Live Near Your Work Program.

Set up a new expense line item #101-1110-411-68-31 in Council's budget called Live Near Your Work Program.

*Gerald G. Friedel, P.E.  
Michael R. Wigley, AIA, LEED AP  
Randy B. Duplechain, P.E.  
Charles R. Woodward, Jr., LS  
W. Zachary Crouch, P.E.  
Michael E. Wheedleton, AIA  
Jason P. Loai, P.E.*

February 14, 2011

City of Milford  
201 S. Walnut Street  
P.O. Box 159  
Milford, Delaware 19963

Attn: Mr. David W. Baird  
City Manager

RE: **PROPOSAL**  
Wastewater Facilities Evaluation  
City of Milford, Delaware  
DBF #P110214

Dear David:

Davis Bowen & Friedel, Inc. is pleased to present this proposal for engineering study services for evaluating the City's existing wastewater facilities. We understand the City would like to have an accurate assessment of its sewer system to determine current needs as well as a working sewer system model to evaluate impacts of future development on the City's sewer infrastructure. We also understand that the evaluation will be co-funded through a grant from DNREC's Wastewater Planning Matching Grant Program as part of the Clean Water State Revolving Fund (CWSRF) Non-Federal Administrative Account. Accordingly, the final report shall meet the requirements of a General Wastewater Facility Plan as specified by DNREC.

A description of our proposed scope of services and the associated lump sum fees for the engineering evaluation are as follows:

**A. EVALUATION OF EXISTING WASTEWATER PUMP STATIONS**

Davis, Bowen & Friedel, Inc. with the assistance of our electrical engineering sub-consultant will perform physical inspections of the City's existing 19 wastewater pump stations and document the condition of the structures, piping, pumping and electrical equipment. We will also review the design criteria for the existing pumping stations to determine the possibility for expansion of the existing facility. In addition to the City's 19 pump stations, we will also coordinate with the Kent County Department of Public Works to evaluate the remaining capacity in the pump station and forcemain through which the City discharges its wastewater.

*Please note that the lump sum fee listed below is based on the assumption that the design criteria for the existing pump stations will be provided by the City. DBF may have records on some of the existing pump stations in our archives but will rely on the City to provide us with any information that they have.*

LUMP SUM: \$43,500.00

**B. HYDRAULIC SEWER MODEL CREATION AND ANALYSIS**

Our office will create a hydraulic model of the City's sewer infrastructure including manholes, gravity mains, pump stations and forcemains. The model will be created based upon information provided by the City from their recent Infiltration and Inflow study. Once created, the model will be used to identify any deficiencies or limiting conditions within the system and to determine the remaining capacities in the City's collection system.

LUMP SUM: \$41,300.00

**C. REPORT PREPARATION**

Based upon the findings of the above evaluations and analysis, DBF will prepare a prioritized list of the necessary improvements projects with preliminary cost estimates. A final report with associated exhibits will be compiled to present the findings of the evaluation and the recommendations for the appropriate path forward.

LUMP SUM: \$15,000.00

**D. EXCLUSIONS / ADDITIONAL SERVICES**

Excluded from this scope of work are services associated with the following activities. These services, if requested, can be performed by our office on an hourly basis in accordance with our attached Schedule of Rates No. 44.

- Survey services for obtaining utility information
- Manhole inspection services
- Reimbursable expenses

We propose to perform the above described work for Items A through C for the lump sums listed above. Billing will be submitted monthly based on the percentage of work completed during the previous month. Billing for any additional services or reimbursable expenses will be submitted

Mr. David Baird  
February 14, 2011  
Page 3

monthly on an hourly basis in accordance with the enclosed Schedule of Rates No. 44. Payment terms shall be in accordance with the attached rate schedule.

Should you find this proposal acceptable, please execute below and return one (1) copy for our files. Receipt of the signed copy will be considered as our authorization to proceed.

On behalf of Davis, Bowen & Friedel, Inc., we appreciate the opportunity to offer our services and look forward to working with you on this project. If you should have any questions or wish to discuss this matter, please contact our office.

Sincerely,



Erik F. Retzlaff, P.E.  
Sr. Engr. / Project Mgr.

Enc.

**ACCEPTED BY:**

---

**Signature**

**Title**

**Date**

**DAVIS, BOWEN & FRIEDEL, INC. ("DBF")**  
**SCHEDULE OF RATES AND GENERAL CONDITIONS**  
 SCHEDULE NO. 44  
 Effective June 1, 2006

<u>CLASSIFICATION</u>	<u>HOURLY RATE</u>
Senior Architect	\$135.00
Architect	\$105.00
Senior Landscape Architect	\$135.00
Landscape Architect	\$105.00
Senior Engineer	\$135.00
Engineer	\$105.00
Senior Planner	\$135.00
Planner	\$85.00
Construction Administrator	\$105.00
Traffic Engineer	\$105.00
Geologist	\$105.00
GIS Specialist	\$95.00
Senior Surveyor	\$135.00
Associate Surveyor	\$105.00
Surveyor	\$100.00
Senior Designer	\$100.00
Computer Graphics Designer	\$85.00
Designer	\$95.00
CADD I	\$80.00
CADD II	\$70.00
Computer Administrator	\$85.00
2 Man Field Crew	\$130.00
3 Man Field Crew	\$165.00
GPS Unit (1 man)	\$100.00
GPS Unit (2 man Crew)	\$140.00
GPS Unit (3 man Crew)	\$180.00
Resident Project Representative	\$70.00
Clerical	\$50.00
Travel	\$0.50
Direct Expense	Cost + 10%
Prints (In-house Reproduction)	\$2.50/sheet

GENERAL CONDITIONS

**INVOICES & PAYMENT**

Invoices are sent monthly or sooner if project is complete. Payment Terms: Net 30 days of invoice date. Any invoice not paid within 30 days shall bear interest at 1.0% per month (12% annually). If required to engage legal counsel to collect an overdue invoice, DBF shall be entitled to recover also its costs of collection, including counsel fees and expenses. DBF reserves the right to adjust its schedule of rates annually. Any such adjustments will be effective within 30 days after written notification to the client.

**TERMINATION OF CONTRACT**

Client may terminate this agreement upon seven days' prior written notice to DBF for convenience or cause. DBF may terminate this Agreement for cause upon seven days' prior written notice to client. Failure of client to pay invoices when due shall be cause for immediate suspension and ultimate termination of services, at DBF's sole discretion. This agreement may be terminated by either party for any reason with 30 days advance notice.

**LIMITATION OF LIABILITY**

Client agrees to limit DBF's liability related to any errors or omissions to a sum that shall not exceed the total professional fee for the project.

**INDEMNIFICATION**

Client and DBF each agree to indemnify and hold the other harmless, and their respective officers, employees, agents and representatives, from and against liability for all claims, losses, damages and expenses, including reasonable attorney's fees caused by the other's negligence. To the extent such claims, losses, damages or expenses are caused by the joint or concurrent negligence of client and DBF, the same shall be borne by each party in proportion to its negligence. This shall in no way affect the limitation of DBF's liability expressed in the preceding paragraph.

**FORCE MAJEURE**

Neither party shall be deemed in default of this Agreement to the extent that any delay or failure in the performance of its obligations results from any cause beyond its reasonable control and without its negligence.

**CONSTRUCTION PHASE SERVICES**

If this Agreement provides for any construction phase services by DBF, it is understood that the contractor, not DBF, is solely responsible for the construction of the project, and that DBF shall not be responsible for the acts or omissions of any contractor, subcontractor or material supplier; for safety precautions, programs or enforcement; or for construction means, methods, techniques, sequences and procedures employed by the contractor, its subcontractors or suppliers.

**OWNERSHIP OF DOCUMENTS**

All documents prepared or furnished by DBF pursuant to this Agreement, including electronic media, are instruments of DBF's professional service, and DBF shall retain an ownership and property interest therein. DBF grants client, during the period of DBF's service, a license to use such documents for the purpose of constructing, occupying and maintaining the project. Reuse or modification of any such documents by client or client's agents, without DBF's written permission, shall be at client's sole risk; and client agrees to indemnify and hold DBF harmless from all claims, damages and expenses, including attorneys' fees, arising out of such reuse by client or by others acting through or with the consent of client.

**USE OF ELECTRONIC MEDIA**

Copies of documents that may be relied upon by client are limited to the printed copies (also known as hard copies) that are signed or sealed by DBF. Files in electronic media format or text, data, graphic or other types that are furnished by DBF to client are only for convenience of client. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. When transferring documents in electronic media format, DBF makes no representations as to long-term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, computer hardware or of a protocol differing from those in use by DBF during the period of this agreement.

**SUCCESSORS & ASSIGNS**

The client and DBF bind themselves, their partners, successors, assigns and legal representatives to the other party to this Agreement and to the partners, successors, assigns and legal representatives of such other party with respect to all covenants of this Agreement. Neither party shall assign, sublet or transfer any interest in this Agreement without the written consent of the other.

**MISCELLANEOUS PROVISIONS**

Unless otherwise specified, this Agreement shall be governed by laws of the State in which the work is performed, and the courts of such State shall have exclusive jurisdiction over any disputes hereunder. Terms in this Agreement shall have the same meaning as those in AIA Document A201, General Conditions of the Contract for Construction, current as of the date of this Agreement. If this schedule is incorporated or referenced in an agreement with client, the terms of this schedule shall prevail in the event of any conflict with the terms of such agreement.

**REIMBURSABLE EXPENSES**

Other expenses known as direct expenses incurred in the interest of the project (including travel, toll communications, postage, delivery, photographs, subcontract engineering, testing or other consultants, renderings, models, etc.) will be billed monthly at DBF's actual cost plus ten percent.

*Gerald G. Friedel, P.E.  
Michael R. Wigley, AIA, LEED AP  
Randy B. Duplechain, P.E.  
Charles R. Woodward, Jr., LS  
W. Zachary Crouch, P.E.  
Michael E. Wheedleton, AIA  
Jason P. Loar, P.E.*

February 14, 2011

City of Milford  
201 S. Walnut Street  
P.O. Box 159  
Milford, Delaware 19963

Attn: Mr. David W. Baird  
City Manager

RE: **PROPOSAL**  
Wastewater Facilities Evaluation  
City of Milford, Delaware  
DBF #P110214

Dear David:

Davis Bowen & Friedel, Inc. is pleased to present this proposal for engineering study services for evaluating the City's existing wastewater facilities. We understand the City would like to have an accurate assessment of its sewer system to determine current needs as well as a working sewer system model to evaluate impacts of future development on the City's sewer infrastructure. We also understand that the evaluation will be co-funded through a grant from DNREC's Wastewater Planning Matching Grant Program as part of the Clean Water State Revolving Fund (CWSRF) Non-Federal Administrative Account. Accordingly, the final report shall meet the requirements of a General Wastewater Facility Plan as specified by DNREC.

A description of our proposed scope of services and the associated lump sum fees for the engineering evaluation are as follows:

**A. EVALUATION OF EXISTING WASTEWATER PUMP STATIONS**

Davis, Bowen & Friedel, Inc. with the assistance of our electrical engineering sub-consultant will perform physical inspections of the City's existing 19 wastewater pump stations and document the condition of the structures, piping, pumping and electrical equipment. We will also review the design criteria for the existing pumping stations to determine the possibility for expansion of the existing facility. In addition to the City's 19 pump stations, we will also coordinate with the Kent County Department of Public Works to evaluate the remaining capacity in the pump station and forcemain through which the City discharges its wastewater.

*Please note that the lump sum fee listed below is based on the assumption that the design criteria for the existing pump stations will be provided by the City. DBF may have records on some of the existing pump stations in our archives but will rely on the City to provide us with any information that they have.*

LUMP SUM: \$43,500.00

**B. HYDRAULIC SEWER MODEL CREATION AND ANALYSIS**

Our office will create a hydraulic model of the City's sewer infrastructure including manholes, gravity mains, pump stations and forcemains. The model will be created based upon information provided by the City from their recent Infiltration and Inflow study. Once created, the model will be used to identify any deficiencies or limiting conditions within the system and to determine the remaining capacities in the City's collection system.

LUMP SUM: \$41,300.00

**C. REPORT PREPARATION**

Based upon the findings of the above evaluations and analysis, DBF will prepare a prioritized list of the necessary improvements projects with preliminary cost estimates. A final report with associated exhibits will be compiled to present the findings of the evaluation and the recommendations for the appropriate path forward.

LUMP SUM: \$15,000.00

**D. EXCLUSIONS / ADDITIONAL SERVICES**

Excluded from this scope of work are services associated with the following activities. These services, if requested, can be performed by our office on an hourly basis in accordance with our attached Schedule of Rates No. 44.

- Survey services for obtaining utility information
- Manhole inspection services
- Reimbursable expenses

We propose to perform the above described work for Items A through C for the lump sums listed above. Billing will be submitted monthly based on the percentage of work completed during the previous month. Billing for any additional services or reimbursable expenses will be submitted

Mr. David Baird  
February 14, 2011  
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monthly on an hourly basis in accordance with the enclosed Schedule of Rates No. 44. Payment terms shall be in accordance with the attached rate schedule.

Should you find this proposal acceptable, please execute below and return one (1) copy for our files. Receipt of the signed copy will be considered as our authorization to proceed.

On behalf of Davis, Bowen & Friedel, Inc., we appreciate the opportunity to offer our services and look forward to working with you on this project. If you should have any questions or wish to discuss this matter, please contact our office.

Sincerely,



Erik F. Rezlaff, P.E.  
Sr. Engr. / Project Mgr.

Enc.

**ACCEPTED BY:**

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**Signature**

**Title**

**Date**

**DAVIS, BOWEN & FRIEDEL, INC. ("DBF")**  
**SCHEDULE OF RATES AND GENERAL CONDITIONS**  
 SCHEDULE NO. 44  
 Effective June 1, 2006

<u>CLASSIFICATION</u>	<u>HOURLY RATE</u>
Senior Architect	\$135.00
Architect	\$105.00
Senior Landscape Architect	\$135.00
Landscape Architect	\$105.00
Senior Engineer	\$135.00
Engineer	\$105.00
Senior Planner	\$135.00
Planner	\$85.00
Construction Administrator	\$105.00
Traffic Engineer	\$105.00
Geologist	\$105.00
GIS Specialist	\$95.00
Senior Surveyor	\$135.00
Associate Surveyor	\$105.00
Surveyor	\$100.00
Senior Designer	\$100.00
Computer Graphics Designer	\$85.00
Designer	\$95.00
CADD I	\$80.00
CADD II	\$70.00
Computer Administrator	\$85.00
2 Man Field Crew	\$130.00
3 Man Field Crew	\$165.00
GPS Unit (1 man)	\$100.00
GPS Unit (2 man Crew)	\$140.00
GPS Unit (3 man Crew)	\$180.00
Resident Project Representative	\$70.00
Clerical	\$50.00
Travel	\$0.50
Direct Expense	Cost + 10%
Prints (In-house Reproduction)	\$2.50/sheet

GENERAL CONDITIONS

**INVOICES & PAYMENT**

Invoices are sent monthly or sooner if project is complete. Payment Terms: Net 30 days of invoice date. Any invoice not paid within 30 days shall bear interest at 1.0% per month (12% annually). If required to engage legal counsel to collect an overdue invoice, DBF shall be entitled to recover also its costs of collection, including counsel fees and expenses. DBF reserves the right to adjust its schedule of rates annually. Any such adjustments will be effective within 30 days after written notification to the client.

**TERMINATION OF CONTRACT**

Client may terminate this agreement upon seven days' prior written notice to DBF for convenience or cause. DBF may terminate this Agreement for cause upon seven days' prior written notice to client. Failure of client to pay invoices when due shall be cause for immediate suspension and ultimate termination of services, at DBF's sole discretion. This agreement may be terminated by either party for any reason with 30 days advance notice.

**LIMITATION OF LIABILITY**

Client agrees to limit DBF's liability related to any errors or omissions to a sum that shall not exceed the total professional fee for the project.

**INDEMNIFICATION**

Client and DBF each agree to indemnify and hold the other harmless, and their respective officers, employees, agents and representatives, from and against liability for all claims, losses, damages and expenses, including reasonable attorney's fees caused by the other's negligence. To the extent such claims, losses, damages or expenses are caused by the joint or concurrent negligence of client and DBF, the same shall be borne by each party in proportion to its negligence. This shall in no way affect the limitation of DBF's liability expressed in the preceding paragraph.

**FORCE MAJEURE**

Neither party shall be deemed in default of this Agreement to the extent that any delay or failure in the performance of its obligations results from any cause beyond its reasonable control and without its negligence.

**CONSTRUCTION PHASE SERVICES**

If this Agreement provides for any construction phase services by DBF, it is understood that the contractor, not DBF, is solely responsible for the construction of the project, and that DBF shall not be responsible for the acts or omissions of any contractor, subcontractor or material supplier; for safety precautions, programs or enforcement; or for construction means, methods, techniques, sequences and procedures employed by the contractor, its subcontractors or suppliers.

**OWNERSHIP OF DOCUMENTS**

All documents prepared or furnished by DBF pursuant to this Agreement, including electronic media, are instruments of DBF's professional service, and DBF shall retain an ownership and property interest therein. DBF grants client, during the period of DBF's service, a license to use such documents for the purpose of constructing, occupying and maintaining the project. Reuse or modification of any such documents by client or client's agents, without DBF's written permission, shall be at client's sole risk; and client agrees to indemnify and hold DBF harmless from all claims, damages and expenses, including attorneys' fees, arising out of such reuse by client or by others acting through or with the consent of client.

**USE OF ELECTRONIC MEDIA**

Copies of documents that may be relied upon by client are limited to the printed copies (also known as hard copies) that are signed or sealed by DBF. Files in electronic media format or text, data, graphic or other types that are furnished by DBF to client are only for convenience of client. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. When transferring documents in electronic media format, DBF makes no representations as to long-term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, computer hardware or of a protocol differing from those in use by DBF during the period of this agreement.

**SUCCESSORS & ASSIGNS**

The client and DBF bind themselves, their partners, successors, assigns and legal representatives to the other party to this Agreement and to the partners, successors, assigns and legal representatives of such other party with respect to all covenants of this Agreement. Neither party shall assign, sublet or transfer any interest in this Agreement without the written consent of the other.

**MISCELLANEOUS PROVISIONS**

Unless otherwise specified, this Agreement shall be governed by laws of the State in which the work is performed, and the courts of such State shall have exclusive jurisdiction over any disputes hereunder. Terms in this Agreement shall have the same meaning as those in AIA Document A201, General Conditions of the Contract for Construction, current as of the date of this Agreement. If this schedule is incorporated or referenced in an agreement with client, the terms of this schedule shall prevail in the event of any conflict with the terms of such agreement.

**REIMBURSABLE EXPENSES**

Other expenses known as direct expenses incurred in the interest of the project (including travel, toll communications, postage, delivery, photographs, subcontract engineering, testing or other consultants, renderings, models, etc.) will be billed monthly at DBF's actual cost plus ten percent.

City of Milford  
Economic Development Advisory Panel\*

Bill Pilecki

David Markowitz

Nolan Williams

Sher Valenzuela

Dave Hitchens

Harvey Kenton

Jason James

Irv Ambrose

Fred Rohm

Craig Crouch

Bob Connelly

Milford School District Representative

\*Nominees 02/28/11