

*MILFORD CITY COUNCIL  
MINUTES OF MEETING  
March 22, 2010*

The City Council of the City of Milford held a Public Comment Session on Monday, March 22, 2010 in the Joseph Ronnie Rogers Council Chambers of Milford City Hall at 201 South Walnut Street, Milford, Delaware, prior to the commencement of the official City of Milford Council Meeting. The purpose of the informal session is to allow the public to speak about issues of interest that impact the City of Milford.

PRESIDING: Mayor Daniel Marabello

IN ATTENDANCE: Councilpersons Steve Johnson, Michael Spillane, John Workman, Jason Adkins, Owen Brooks, Jr., Douglas Morrow, James Starling, Sr. and Katrina Wilson

ALSO: City Manager David Baird, Police Chief Keith Hudson and City Clerk/Recorder Terri Hudson

Mayor Marabello declared the Comment Session open at 7:01 p.m.

Joe Palermo of 5 Misty Vale Court, Meadows at Shawnee, stated the last several months a group of citizens representing the various subdivisions have worked diligently on the HOA Committee. He said they have covered legal issues, insurance issues, Title 25 (covers HOA's) and stormwater ponds. A number of recommendations have been submitted and he hopes that council look over the documents and give it careful consideration in hopes that some good will come out of it and it is resolved in a proper manner.

With no additional persons signed up, Mayor Marabello closed the Public Comment Session at 7:05 p.m.

Respectfully submitted,



Terri K. Hudson, CMC  
City Clerk/Recorder

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A Meeting of Milford City Council was held in the Joseph Ronnie Rogers Council Chambers of Milford City Hall, 201 South Walnut Street, Milford, Delaware on Monday, March 22, 2010.

PRESIDING: Mayor Daniel Marabello

IN ATTENDANCE: Councilpersons Steve Johnson, Michael Spillane, John Workman, Jason Adkins, Owen Brooks, Jr., Douglas Morrow, James Starling, Sr. and Katrina Wilson

ALSO: City Manager David Baird, Police Chief Keith Hudson and City Clerk/Recorder Terri Hudson

Mayor Marabello called the Council Meeting to order at 7:05 p.m.

*City of Milford Charter/Unresolved Issue*

It was determined one last matter is unresolved and a decision needed so the charter amendments can be finalized. The following recommendation was based on the last discussion and overall consensus of council, with the exception of Councilman Spillane:

*If a council member files and runs for mayor, whether or not they are elected to said office, the term as councilman shall automatically expire on the second Monday of May on the year of the election. If they have a year remaining on their term, then that portion of their unexpired term as a council member shall be filled at the same annual election in which they have filed to run for the office of mayor. (In this case, the deadline to file for mayor would need to be changed to an earlier date than that filing date of council—for example—ninety days before the election & council would remain at sixty days before the election).*

City Solicitor Willard advised that a person can legally run for two offices at the same time; however, the charter is silent on the issue and the committee decided the matter should be brought before council. In this situation, he stated that when a person runs for mayor, their council seat would be filled at the same election the mayor is elected, regardless of whether or not they win the mayor's seat.

City Manager Baird agreed there are a number of ways to address this, but this language was drafted to spark some conversation. It can be acted on as is being presented or it can be amended.

Mayor Marabello recalled conversation about whether to permit a councilperson who is not up for re-election to run for the mayor's seat without losing his/her seat. However, in that case, if the councilperson was elected mayor, a special election would be needed to fill the newly vacated council seat. The proposed language would prevent that from occurring because an election would be held for that seat at the same time as the general election.

Mr. Adkins personally disagrees with a person running for two seats at once because of the undue burden to the city as a result of the special election. He recalled one example requiring the person to resign their council seat before they were able to run for office. The solicitor stated that in essence, the proposed language requires that councilperson to vacate their seat at the time of the swearing in, therefore, that councilperson does resign.

Mr. Spillane pointed out a councilperson whose term is not expiring at the same time as the mayor is able to run and hold on to that seat for another year even if he loses. Mr. Willard explained that under this scenario, it is similar to having a special election for that the balance of the term left (one year) but prevents the additional costs of a special election.

Mr. Brooks recommends leaving the charter as it is currently written noting it has not been a problem in the past.

Mayor Marabello confirmed that it is councils' wish that any councilperson be permitted to run for mayor regardless of when their term expires.

There remained mixed opinions with various scenarios presented.

Mr. Spillane then moved to allow a person to run for the office of mayor and council simultaneously. Mr. Brooks seconded motion.

The mayor stated the charter, as it is currently written, allows that and this vote will confirm that decision.

Motion carried by the following 5-3 roll call vote:

Yes-Spillane, Workman, Brooks, Morrow, Wilson  
No-Johnson, Adkins, Starling

Mayor Marabello stated the motion passed to allow a councilperson whose term is up the same time as the mayor, to run for the offices of council and mayor simultaneously. If that councilperson wins, a special election will be required to fill the vacant council seat.

#### *Ordinance 2010-4/Adopting Amended Charter*

City Solicitor Willard explained there are a number of ways to amend the charter according that town's individual charter. The most common is to present it to the general assembly to be passed and subsequently signed by the governor into law. Therefore, no ordinance is needed though a resolution can be drafted. Because council wanted a public hearing on the amendments, he recommends that be scheduled next.

Mayor Marabello stated he will discuss the matter with the city clerk and provide a date for the public hearing at the next meeting.

It was agreed the final document would be prepared and presented to council at the next meeting. The public hearing would then be scheduled for the April workshop.

#### *Appointment of City of Milford Election Board*

Motion made by Mr. Workman, seconded by Mr. Adkins to appoint the following individuals to the City of Milford Election Board:

Tamelo Mallamo	320 Lakelawn Drive
Joanne Leuthauser	509 Ashley Way
Phyllis Fox	200 E. Clarke Avenue

Motion carried by unanimous roll call vote.

When asked about the selection, the city clerk advised these three individuals are those being appointed only to the election board. The election officers will be appointed at the April 12<sup>th</sup> meeting as is required by the city charter.

#### *Cascades Housing Development/Tax Abatement Request*

City Manager Baird recalled that David Holden, representing the Ingerman Group, presented council with a concept of Cascades Apartments and the low income housing tax credit program. At that meeting, council voted to support the application. The second issue was not on the agenda and the reason it was deferred until tonight's meeting.

Mr. Baird asked the record reflect that a statement he made at that meeting that indicated the city did not provide tax credits to the Brightway Commons project which was incorrect. Through research, it was determined a tax abatement was provided to Volunteers of America for a similar project. In that case, two types of tax credits were granted. One was on the renovation of the existing properties with no taxes applied for a ten-year period. Council also provided a

five-year exemption on the newly constructed units.

Mr. Holden then stated he prepared the following financial analysis as was requested at the last meeting:

Current Real Estate Taxes for Entire Cascades Subdivision  
\$821 per year

Estimated Real Estate Taxes for Cascades Apartments  
Phase 1

86 Units at \$254 per unit    \$19,304

Potential Change in Real Estate Taxes to City of Milford

Year 1 Based on 100% Abatement	(\$821)
Year 2 Based on 80% Abatement	\$3,040
Year 3 Based on 60% Abatement	\$6,901
Year 4 Based on 40% Abatement	\$10,761
Year 5 Based on 20% Abatement	\$14,622
Year 6 Based on 0% Abatement	\$18,483

He advised those taxes represent Phase 1 of the project which is half the project. The taxes will be phased in over the next five years. He added the estimated fees for water and sewer fees, utility and building permits are approximately \$300,000.

Mr. Holden advised the tax abatement and letter of support from the City of Milford makes their application to Delaware State Housing Authority more competitive.

Ms. Wilson moved to approve the five-year tax abatement at 100% for the first year, and reduced 20% each year thereafter until the sixth year when it is fully taxed, seconded by Mr. Johnson.

Mr. Adkins stated he supports the project and the city providing its support of the application. However, the tax abatement is a very significant one. He personally would have preferred a one or two-year abatement and feels this will have a substantial financial impact over the five-year period. He prefers not following a trend simply because something it has been done in the past.

Mr. Holden pointed out this is different than was done in the past because that was a 100% abatement over a long period of time. This request is for 100% this year with a decrease of 20% each following year.

Ms. Wilson stated that though she is very cognizant of the financial situation of the city, she feels that affordable housing is very much needed and this incentive can be compared to the discounted electric rates being improved for large industries. She feels Milford needs this type housing and these opportunities are far and few between.

Mr. Holden pointed out the city is currently collecting \$821 on the property. Beginning year two, \$3,040 will be received, \$6,901 the second year and each following year the taxes will increase.

Mr. Workman agreed this is will have a significant financial impact pointing out the \$821 is based on undeveloped land and once it is developed, the land becomes more valuable and the taxes would then increase.

Motion carried by the following 5-3 vote:

Yes-Johnson, Workman, Adkins, Starling, Wilson  
No-Spillane, Brooks, Morrow

Mr. Spillane votes no stating six years is too long a period.

Mr. Brooks votes no stating that he must consider the condition of the economy and the budget we are preparing where it has already been implied that funding will be tight. He added that six years ago when the abatement was approved for Brightway Commons, there was a lot of development occurring and revenues were coming in on a regular basis which is no longer the case.

Mr. Morrow votes no stating the city needs to be fiscally responsible and must review these projects as they are being presented in comparison to the city's financial situation at that time.

With no further business, Mayor Marabello declared the Public Hearings adjourned at 7:36 p.m.

Respectfully submitted,

A handwritten signature in cursive script that reads "Terri K. Hudson".

Terri K. Hudson, CMC  
City Clerk/Recorder

*MILFORD CITY COUNCIL*  
MINUTES OF MEETING  
*March 22, 2010*

The City Council of Milford met in Workshop Session on Monday, March 22, 2010 in the Joseph Ronnie Rogers Council Chambers of the City of Milford City Hall, 201 South Walnut Street, Milford, Delaware.

PRESIDING: Mayor Daniel Marabello

IN ATTENDANCE: Councilpersons Steve Johnson, Michael Spillane, John Workman, Jason Adkins, Owen Brooks, Jr., Douglas Morrow, James Starling, Sr. and Katrina Wilson

ALSO: City Manager David Baird, Police Chief Keith Hudson and City Clerk/Recorder Terri Hudson

Mayor Marabello convened the Workshop Session of City Council at 7:35 p.m.

*Local Service Function Concept/City of Dover Resident N. C. Vasuki*

Mayor Marabello informed council the City of Dover is requesting Milford's support in the adoption of a resolution to mirror what was done in New Castle County. He explained that residents in incorporated areas are paying double property taxes and this will mirror the effort to give those residents some relief.

Mr. Vasuki stated he lives at 235 Carnoustie Road, Dover, Delaware. Because Dover Councilman Ruane had a council meeting this evening, he asked Mr. Vasuki to present the information.

Mr. Vasuki advised he has been a long term resident of Dover during which time he has paid taxes both to the City of Dover and Kent County. He said the question came up recently about what the residents living in municipalities are getting for the county taxes they paid because services are already provided by the town. He said the issue has been considered several times and recalled that a former Dover Mayor Crawford Carroll tried numerous times to get a reduction of county property taxes for municipal residents. It has been introduced to the Delaware General Assembly five times. Five times it passed the House but was blocked by the Senate.

He recalled that last year, the county raised property taxes by five cents despite the fact the residents of the municipalities receive no extra service from the county. That is when the question again arose about what municipalities are getting for their county taxes.

Mr. Vasuki said it is clearly evident that those homeowners in the incorporated areas are paying a lot more taxes than those in the unincorporated area. They believe they are subsidizing the services for those living outside the municipal areas.

He reported there are twenty incorporated areas in Kent County. When reviewing Kent County Property Taxes, the residential values for municipalities account for \$798 million. Kent County unincorporated areas take in \$1.663 billion for a total of \$2.46 billion in residential taxes. The commercial properties in municipalities total \$661 million versus \$155 million in unincorporated areas for a total of \$817 million. He said the county tax rate is 31 cents per hundred dollars of 60% of the assessed values; the municipalities pay a total of \$4.52 million to the county while unincorporated areas pay \$5.638 million. Currently, municipal properties are paying 44% of the taxes to the county.

Mr. Vasuki emphasized the fact the Kent County tax rate is the same for tax payers in incorporated and unincorporated areas. Non-municipal property tax payers pay only Kent County property taxes.

Mr. Vasuki noted that City of Dover property owners pay 27.20% of the county's taxes though the city's population is only 23% of the county.

He pointed out that Kent County uses property tax and other revenues to pay for similar or the same services already provided by the City of Dover and other incorporated areas. Dover determined that the services funded by the city total \$17,677,231 for the same services provided in the county for \$14,511,800 per the FY 2010 Dover and Kent County budgets.

He said the City of Milford provides the same or similar services. Thereby, municipal property tax payers are paying twice for common services. They believe it is only fair to ask for some tax relief from the county.

New Castle County has already obtained tax adjustments for Newark, Wilmington, Middletown and ten other municipalities. He said that Title 9 Del. Code Chapter 11, Sections 1102 and 1131 provide the basis for the tax relief.

He explained that New Castle County's budget is divided into two budgets—a general operating budget and a local service function budget. Everyone in the county pays toward the general operating budget. Those living in municipalities that receive local service pay a much lower rate. Those living in Newark or Wilmington pay 65% less than people living outside the city limits.

Mr. Vasuki suggests a similar system for Sussex County. The City of Dover has introduced a resolution to ask the General Assembly members to provide some property tax relief. The City of Smyrna and Harrington have already supported the concept and he is asking for Milford's support.

It was confirmed that New Castle municipalities have been receiving this relief since 1967. When asked about the percentage, Mr. Vasuki stated that in New Castle County, the municipalities have to make application by showing how much money they are spending on common services. The county takes that into account and determines the amount.

Mr. Vasuki stated there has been no feedback from Levy Court at this time. The City of Dover has two commissioners on Kent County Levy Court; one is supportive and the other has been silent.

Mayor Marbello verified that the intent is to have as many municipalities support this concept. Mr. Vasuki agreed there is a greater likelihood of this occurring with more towns participating.

Ms. Wilson noted that Executive Director George Wright of the Delaware League of Local Government is supportive of this concept.

The mayor requested the resolution be placed on the April business meeting agenda for adoption.

Mr. Baird added that though this may not be a top priority of the current legislative session, the plan is to address it during the next session.

Mr. Vasuki thanked council for allowing him to address them this evening.

City Solicitor Willard noted that while this was directed toward Kent County, he suggests that something similar be drafted for Sussex County. The mayor agreed that should be considered as well. The city manager said it is being discussed and because it is not as organized, he does expect something formal in the next six months to a year.

#### *Update on I&I Study/Project/URS Corporation*

City Manager Baird said he asked URS to give council an update on the work being done to address the I&I problems.

A short documentary film was then presented in relation to the importance and protection of water resources and the impact on other infrastructure.

URS Representatives Ed Strauss, Jerry Katzmire and Tom DeLorimier were in attendance on behalf of the project.

Mr. Katzmire explained he primarily works in the area of stormwater. He reported they have completed the initial phase of an I&I study whose purpose was to determine how much leakage there is in the system and where it is located.

A power point presentation then followed (see attached).

He advised that some GIS mapping was done in addition to some televising of the pipe on Front Street which he said is normally the second phase. Because the city anticipated problems with the pipe on Front Street, they began videoing it.

Mr. Katzmire reported the previous CAD maps were converted to GIS drawings to facilitate the study. That will also help with the preparation of the documents to bid out repair projects when that becomes necessary. The GIS mapping allows data to be linked to the mapping. The 760 manhole inspection reports completed seventeen to twenty years ago have been scanned and hyperlinked to the manhole numbers on the GIS mapping. Those numbers can be clicked and a report pops up. The videos on Front Street are also linked to the GIS map; clicking on a number will now show the condition of the pipe, size of the pipe and material of the pipe at the time the video was taken. As the study progresses, additional information will be linked to the map.

Approximately 2,685 feet of pipe on Front Street between Truitt Avenue and Kent County Pump Station #7 was videoed. The pipe flowing to the Kent County Pump Station is a 24-inch reinforced concrete pipe that was found to be in good shape. The pipe that comes back toward Truitt Avenue is varied sizes of vitrified clay pipe with two foot joints that indicates it is very old and was possibly installed during the 1940's.

Some problems include holes in the pipe; some are as large as a foot to a foot and a half in diameter. Outside one hole, a sink hole was discovered beneath the paving which has the potential to cause a heavy vehicle to fall into a sink hole.

Cracks were also found in the piping, some with a four-quadrant crack, which is the last phase of pipe deterioration before it fails and collapses.

Mr. Katzmire said the recommendations are based on the leakage found. The added benefit of looking for leakage is the ability to find structural problems in the pipe and though the pipe may not be leaking, it is broken and requires repairs.

He explained that infiltration is groundwater that flows into cracked pipes and/or manholes. It involves daily leakages in relation to the groundwater which fluctuates.

Infiltration is found with flow metering and nighttime Weir testing. Sixteen flow meters were spread throughout the town and testing was done at night when no one was using the system.

Inflow is the spikes in the flow as a result of the rain. It is water flowing into the top of the manhole covers and the water coming from catch basins and storm sewers connected to the sewer. It is derived by subtracting base flow infiltration from the wet weather flow.

Mr. Katzmire reported that infiltration was 700,000 gallons per day on an annual average. During the flow metering period, infiltration was as low as 300,000 to 400,000 gallons per day when the weather was dry and the water table was down. It increased to over one million gallons during wet periods when the water table was high. That translates to 255,500,000 gallons per year of infiltration. This is at a Kent County cost of \$2.34 per 1,000 gallons of sewage which totals almost \$600,000 per year.

The inflow is 711,000 gallons per day per inch of rain at approximately 45 inches average rainfall per year. This translates into 87,000 gallons per day or an average of 32,000,000 gallons per year or \$75,000 a year in inflow.

As a result of these findings, the city is spending \$670,000 a year because of infiltration and inflow.

Mr. Kazmyer explained the next step is a phase sewer system evaluation survey. Now that they have determined where the problems are and how much of a problem there is, they need to review the problems to determine how to fix them. To do that, the inside of the pipes will need to be televised. Also, manhole inspections are needed. Most of the manholes with the old pipe are brick that have deteriorated over the years. The portion of the manhole that is beneath the groundwater is leaking. When it rains, the upper portion of the manhole begins to leak once the ground becomes saturated.

Smoke testing is a method to locate inflow and will involve the open cleanouts and down spout connections. If they are

already in an area where piping is being televised and manhole connections are being done to locate infiltration, then smoke testing can be productive and inexpensive. He feels it would be advantageous to address inflow while they are there.

If both are done in an area, they can walk away knowing that infiltration has been addressed as well as inflow.

Once the televising, smoke testing and manhole inspections are completed, they will group those deficiencies into various categories. They will then prepare construction documents and cost estimates for each of the projects. They will then proceed with the bidding, followed by construction.

The proposal includes the investigation, analysis of the data, grouping of the data and preparation of the bid documents for construction and cost estimates.

Mr. Katzmire said they will begin the work by prioritizing the projects based on leakage. He then referenced the high priority areas based on flow metering and Weir testing.

The Weir test findings are prioritized in gallons per day, per inch diameter, per mile of pipe. The highest priority area is greater than 3,000 gallons per inch diameter per mile of pipe. Of the 700,000 gallons they measured, 323,000 was infiltration. From the flow metering and Weir testing, it was narrowed down to specific areas within the city.

The next area contained larger pipe was showing 268,000 gallons which was identified by a flow meter because Weir testing cannot be performed on larger piping.

He then referenced the next four areas to be tested.

Mr. Katzmire advised their plan is to continue using smoke testing, television and manhole inspections and address those areas showing the highest gallons of daily leakage.

It will be broken down into years with the highest priority area and Basin 6 done in year one. He did reference an area where they found a flow meter downstream with a separate basin that showed the highest amount of inflow. He reiterated the work will be prioritized beginning with the highest infiltration while chasing the largest source of inflow as is indicated by the flow meters. Therefore, they are recommending that area be smoke tested as well.

He explained that in fourteen weeks, they will address the highest priority areas and smoke testing in Basin 6, deficiencies will be grouped, bid documents prepared and construction estimates provided. Starting in July of 2010, the second year study will continue with the preparation of bid documents and pipe rehabilitation projects in the prioritization order.

When asked how much of the 323,000 gallons identified as infiltration can be removed, Mr. Kazmyer said that conservatively 50%. He noted that some of the sources are on private property, which include a foundation drain and broken sewer laterals. Those items on private property are not included in this study and would involve a completely different project. However, that infiltration will continue. If it is later determined that should be addressed, another I&I private property program could be added.

Mr. Brooks asked how often a study like this is needed, noting it was last done during the early 1990's. Mr. Katzmire said that depends on the flows. He suggests budgeting every year to allow a review of those areas that have not been leaking. It is inexpensive to put in flow meters and gauges what has already been done to determine if it is coming back.

Mr. Katzmire said the rehabilitation methods they are recommending should stop the problem. He again emphasized the private property issues have the ability to create additional ones.

The city manager advised that between July 2008 and June 2009, 32% of the flow sent to Kent County was related to I&I. From July 2009 through the end of February 2010, 40% of the flow was related to I&I though the wet weather had some impact. Eight months into this budget, the city has spent \$607,000 on I&I which has resulted in \$800,000 of payments to Kent County of stormwater that does not need to be treated.

Ms. Wilson confirmed that if there is leakage on private properties, it is the city's responsibility to notify those property owners. Mr. Baird stated that is correct.

Mr. Adkins asked if we should have allowed a more active schedule of rehabilitating our infrastructure to prevent the deterioration; Mr. Kazmyer said he is unable to answer that because there is a great deal of old infrastructure which is normal. He added that a budget determines how proactive a city can be in these situations. Mr. Adkins asked the city manager's opinion; Mr. Baird agrees the city needs to be more proactive on how to tackle this before it becomes a citywide issue as it is right now. If we can save 50% of the costs to Kent County, he feels that is a substantial savings. He does not believe this will result in a rate reduction as those savings will be put back into rehabilitation projects though it will stabilize our user rates. This will also allow some additional revenue to pay for these improvements without having to go back to the voters to ask for additional funding for more capital projects.

Mr. Spillane asked how much of the fees were being paid by new developments to repair and upgrade the infrastructure. Mr. Baird explained those impact fees are for system wide improvements and new extensions to the system, not for operation and maintenance costs associated with the system as a whole. Any savings goes into the reserve accounts that are reviewed in the finance report each month. He agreed that with more customers and more connections, the per capita cost decreases.

It was noted the newer development areas are not problem areas. Without the new developments, the sewer rates would be higher because there would be fewer customers.

Mr. Baird referenced the proposal submitted by URS which is included in the packet. He confirmed the matter will be voted on at the April 12<sup>th</sup> meeting. He also confirmed that part of the referendum passed in February 2008 included work for I&I. However, the city did not fund the project for a six to ten-year period.

#### *HOA Subcommittee Findings & Recommendations*

Chairman Workman explained that two ad hoc committees were formed from the HOA Subcommittee. Tonight, Stormwater Management Pond Ad Hoc Chair Charles Doran will provide the first recommendation though additional matters will be brought before council.

Charles Doran of 133 N. Landing Drive, Knotts Landing then thanked Councilman Spillane and Councilman Workman for their assistance and support of the committee.

He then provided the following committee report:

The Storm Water Management Ad Hoc Committee was formed from the HOA Sub Committee to focus on and address issues and concerns identified with community storm water ponds and to bring forth recommendation (s) for improvement to city council.

The use of storm water ponds has become a common method of storm water management for both commercial and residential developments to regulate the storm water runoff from these areas.

Currently in Delaware, responsibility for maintaining pond conditions to federal and state standards has been left to private entities. In the case of ponds in residential communities, this responsibility has fallen to respective community homeowner associations or maintenance corporations(as in the case of Knotts Landing). Once the community is turned over from the developer to the homeowners, the care and feeding of the ponds falls on the residents.

Conservation Districts within each of the three Delaware counties have been delegated by DNREC to regulate the Storm Water Management Program regulations initiated July 1991.

He said the main reason for the city to look at this can be compared to the large growth that occurred in New Castle County in the 70's and 80's. A lot of residential development sprung up and along with it came these ponds. In the early 2000's,

it reached a problem stage when many of the ponds failed. The county was overwhelmed with the problems which then fell on the residents living in those subdivisions. The state and New Castle County took on a remediation project to repair and restore those ponds through what was called an amnesty program.

Newark and Middletown municipalities have in varying forms taken on the pond responsibilities within their boundaries. The care and maintenance of those ponds are no longer in the private hands of the HOA.

Newark, with the help of the University of Delaware, has developed a stormwater utility for the City of Newark. He understands they are preparing to take it to the citizens for a referendum to implement it.

The committee has come up with three recommendations they believe will offer immediate and long term benefits to the city and its citizens. They are suggesting the city become more involved in the ongoing care and maintenance of the storm ponds once they are turned over by the developer.

The following recommendations were then made to City Council:

\*Pursue immediate measures to mandate city responsibility for ongoing maintenance of all future storm ponds receiving approval for construction.

\*Effective immediately, require the city's acceptance / dedication of streets and other infrastructure be contingent upon the respective county Soil Conservation District's inspection and approval of storm water facilities.

\* Authorize a study to determine the feasibility and process to bring all existing storm water retention ponds in Milford under the city's jurisdiction for care and maintenance responsibility

He then provided the following rationale to support the committee's recommendations:

Storm Water Management, like trash removal and sewage treatment, is an element of local government's responsibility to provide essential services for the health, welfare and safety of its citizens. Maintaining the status quo is to ensure that Milford will, in a relatively short period of time, lose all visibility, planning and control for Storm Water Management.

History shows that over time, HOA's do not have a good track record of maintaining those standards which has ultimately lead to public intervention and costly repair and recovery measures.

HOA organizations do not have the expertise, skills and knowledge to effectively and efficiently maintain water quantity and quality to standards.

Governing entities that have experienced problems are now proactively taking steps to exercise greater control and management responsibility for storm water ponds within their jurisdictions. Moreover, they have recognized the long-term benefit and need to incorporate management of private storm water collection ponds into the total sediment and storm water management effort.

Ponds in residential communities and commercial locations are but one link in a complex chain of storm water management. These ponds are an important link in the chain and, if not properly maintained, will have an adverse impact on water quantity and quality in and beyond the bounds of the development.

Community and commercial storm ponds are subjected to infiltration of runoff water from outside their respective property lines and as well as flow water into the watershed. This can be found in every subdivision though the most pronounced example in Milford is the Meadows at Shawnee where water is coming across Route 1 through a culvert heading into their ponds.

Subdivision homeowners and commercial entities can be viewed as being financially penalized. They have the risk in the long run of the ponds, pay pond maintenance charges in addition to their full share of city and county taxes.

The timing appears right for City of Milford to give this serious consideration. This is based on the fact that all of these ponds are currently in reasonably good shape. A lot has been done to take care of the ponds, but over time there is no guarantee that care will continue. Compounding that problem are the additional ponds being built as the city expands in the future. City responsibility for maintenance of the ponds will ease and facilitate the transition through some needed form of future storm water utilities.

The experts the Ad Hoc Committee contacted were encouraging and supportive of the effort and direction the committee was pursuing. Kent and Sussex Soil Conservation District authorities both supported their recommendations to council.

Below was taken from Title 7 Delaware Administrative Code – Natural Resources and Environmental Control, Section 15.3:

“The Department encourages, and will provide technical assistance to any Conservation District or local jurisdiction who chooses to assume the maintenance responsibility for storm water management structures on at least residential lands. Public maintenance provides a reasonable assurance that maintenance will be accomplished on a regular basis.”

Mr. Doran said that there is much more work needed on this matter. The following steps are being requested of city council:

\*Embrace the recommendations made herein, deeming them worthy of further pursuit by the City

\*Identify and enlist and/or assign appropriate resources and responsibilities to conduct feasibility and financial assessments to implement the recommendations.

The committee expresses their sincere gratitude to the following individuals who were consulted and provided invaluable learning and assistance:

Jared C. Atkins, Program Manager  
Kent County Soil Conservation District

Kelly L. Wilson, Urban Conservationist  
Kent County Conservation District

Jessica Watson, Program Manager  
Sussex County Soil Conservation District

Michael D. Harris, Environmental Compliance Manager  
New Castle County

Ellie Mortazavi, Civil Engineer I  
New Castle County

Janice Catherman, Assistant Land Use Administrator  
New Castle County

Kelly Densmore, Stormwater Program Coordinator  
City of Newark

David W. Baird, City Manager  
City of Milford

Mark S. Mallamo, City Engineer  
City of Milford

When asked who requires the stormwater management facilities, Mr. Doran explained that Delaware Code requires any land disturbing activity that affects 5,000 square feet or more must have an approved DNREC sediment and stormwater management plan. In that manner, water is unable to leave that site at a rate greater than prior to its development.

Ms. Wilson then confirmed that the schools are responsible for their new stormwater ponds.

Mr. Spillane recalled that back in 2004, at the time of the construction boom, the city took over the maintenance of some ponds. Sometime later, the city felt the subdivisions needed to maintain their ponds. Currently, he believes the city is maintaining approximately ten ponds.

Mr. Baird confirmed that the city maintains the ponds in our business park, the one at Masten Circle and the one at Saw Mill Village. Mr. Spillane pointed out that the maintenance of the Saw Mill Village pond came as a recent surprise to the city though it was part of an agreement signed several years ago.

Mr. Spillane pointed out the city has the expertise and ability to maintain the ponds. Therefore, it is his opinion the city should step up and take over their maintenance. His concern is the overflow on roadways and yards, which ultimately will flow into the streams and eventually into the bays.

When comparing residential to commercial ponds, Mr. Doran believes the priority should be the residential ponds because they are a greater risk, though commercial ponds should be excluded completely.

HOA Chairman Workman then thanked the Stormwater Pond Ad Hoc Committee for the work and time they have devoted to this issue. He then asked council to consider what future problems could occur if this is not addressed. He asked this be added to the next agenda to allow council to decide whether to proceed with the recommendations.

He added there is another matter that needs to be brought before council at a future date.

When asked the city manager's suggestion, Mr. Baird explained it could be proposed the city take the ponds over though it could also remain as it currently exists. If council decides to take them over, we will need to consider some additional revenue to offset any associated expenses like the stormwater utility the committee has discussed.

Mr. Baird agrees we should move forward as the committee recommended. He agrees that in the future, stormwater is something the city will have to address because it is something that is not going to go away.

The mayor thanked Mr. Doran for his informative presentation emphasizing its importance and need for council to address.

#### *Sussex Conservation District/Jessica Watson/Stormwater Management Presentation*

Mr. Workman then introduced Ms. Watson, Program Manager of the Sussex Conservation District.

Ms. Watson then addressed council reporting the Erosion, Sediment and Stormwater Programs are state regulations established by law in 1991. It requires all land disturbing activities over 5,000 square feet to operate under an approved plan. Whether you are constructing a single family home, a residential community or a Walmart, you are required to operate under some type of permit.

The program is delegated to local municipalities through Kent and Sussex Conservation Districts and overseen by DNREC. District responsibilities include plan review to ensure they are in compliance with state regulations which include erosion and sediment control. The controls are used during construction to minimize the transport of sediment into our waterways as well as stormwater management. This ensures the water is managed as the water shed is changed. For example, if an agricultural site is changed to an impervious area, runoff from that property will increase which is why stormwater ponds are used to prevent flooding down the stream. They also provide water quality treatment.

Ms. Watson explained that though the state specifies where the ponds go, they do not design the ponds. Design consultants

are hired to determine what type of facility is feasible for that location. It is reviewed for compliance with state regulations to make sure it is applicable for that site.

They also are responsible for construction inspection until it is completed. For a residential community, they are responsible for inspecting that community until every house is built out which typically takes a long period of time. The district is also responsible for maintenance, inspection and technical assistance. They provide technical assistance to homeowner associations or developments to ensure their stormwater is functioning correctly.

Successful maintenance is dependent upon the design, construction inspection and how that organization structure is organized. It is the district's job to make sure they are properly reviewing the plans, complying with state regulations, it is appropriate for the site and provides access for future maintenance. The as-builts must be approved by the conservation district to ensure it was built correctly.

If something is not maintained properly, it will deteriorate over time. There is a concern that enough money is set aside by communities and developers for future maintenance.

When the district provides technical assistance, they are making sure the stormwater facility is functioning as was intended. They will look for vegetation and ground cover to make sure that facility is not eroding. Animal burrows and unauthorized plantings can create expensive, long term maintenance issues and need to be corrected early.

A stormwater facility has an outlet structure designed to meter the flows to pre-development rates. State regulations specify they are to manage to pre-development rates for the two and ten year storms and safely convey the hundred-year storm. She emphasized the importance of preventing any obstruction which can create flooding internally in a community.

Ms. Watson then discussed the three types of ponds.

She explained that wet ponds are constructed basins that have a permanent pool of water throughout the year. The intent of a dry pond is that water flows to that pond, is then treated for quantity and quality and then discharged. The pond should not have a permanent pool. An infiltration pond is one that does not have an outlet structure and solely relies on the permeability of the underlying soils. There is testing done by the district to make sure it is feasible in a particular location.

With groundwater being at historical highs the last few months, she said a lot of ponds are not functioning as were intended. Many ponds have caused flooding within the development including roadside swales and roadways.

The district has a number of maintenance challenges including drainage issues, appearance, responsibility, etc. They receive questions from homeowners associations when they find out they are actually responsible for maintaining the facility after it is turned over from the developer. If nothing is done, the ponds will fail.

Ms. Watson said in some of the newer communities, a pond can be an amenity to the community and enhanced with fountains and vegetation. They do not address the maintenance of algae and other vegetation, but do provide them with technical assistance on treatment.

She said a fountain is not required under state regulation but is encouraged and actually helps aerate the system and reduces the mosquito population. A vegetative buffer around the perimeter of the pond reduces nutrients and algae in addition to deterring geese.

Outlet structures are very important. Keeping the drains open and outlet structures free from obstruction is vital. On going maintenance must be done on a regular basis and will become an expensive fix if it is neglected.

Various pictures of both neglected and healthy ponds were also shown.

Mr. Workman asked how often the district inspects the ponds once they are turned over to the HOA; Ms. Watson said that annual inspections are supposed to be done. But because of a decrease in staff numbers, most of the time they go out on

an as-needed basis or if someone calls to ask for assistance. Most of the projects are still considered active. They realize that with the economic situation, many of these ponds will sit for longer periods of time. There is a need for some type of maintenance plan before it is turned over to the HOA. She said unfortunately, they have not visited all the stormwater facilities and currently do not have a total of how many exist at this point.

Ms. Watson noted there are 2,400 projects that were approved by the conservation districts.

She said the goal of the district is to make the HOA's and homeowners aware of any potential problems and to encourage early maintenance before the problems becomes much larger.

When asked if the state may consider stormwater utilities in the future, Ms. Watson said she does not believe that will be done at the state level. There is language in the regulations about stormwater utilities. However, at this point, they want every county to investigate their own. She recalled a study that was done in April 2008 for Sussex County, but was not something the county was interested in at the time. There are other municipalities who have pursued their own studies to determine the type of services they are willing to provide.

Mr. Spillane asked if she felt the stormwater utility should be done at the city level, Ms. Watson reiterated that she feels it would be beneficial to have a study done to see what type of services can be provided, how much it will cost and what that utility tax would need to be. There is a lot of information needed to make that decision though she feels Milford is on the right path in moving forward with the issue.

Council thanked Ms. Watson for providing this presentation and information. The mayor agrees it is beneficial for Milford to become proactive to prevent the situations that occurred in New Castle County.

#### *Review of 2010 Voter Registration List*

Mayor Marabello advised the most current registration list has been provided for council to review. Anyone with any changes should contact the city clerk so the list can be certified at the April 12<sup>th</sup> meeting.

With no further business, the Workshop Session concluded at 9:24 p.m.

Respectfully submitted,



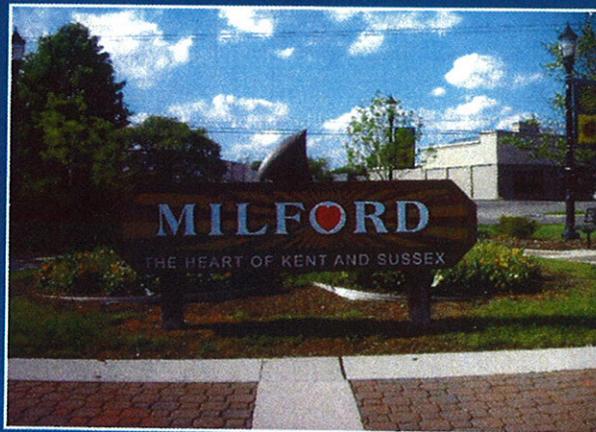
Terri K. Hudson, CMC  
City Clerk/Recorder

Attachment:

Sewer System Evaluation Study

# *Sewer System Evaluation Study (SSES)*

*City of Milford, Delaware*



March 22, 2010

**URS**

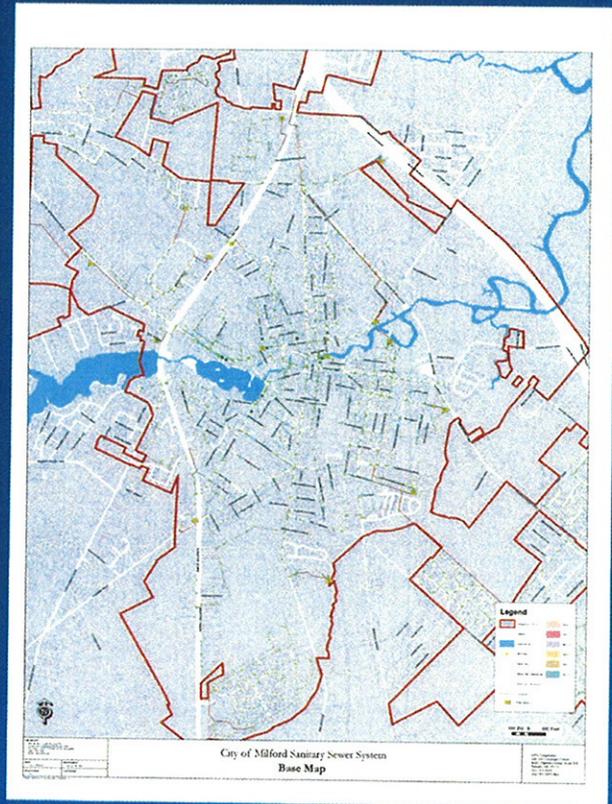
# Update

- I&I Study
  - Geographic Information Systems (GIS) Mapping
  - Front Street Investigation
  - Report
- Next Step
- Path Forward
- Questions

**URS**

# GIS Mapping

- Existing Electronic Drawings Converted to GIS
- 760 Manhole Inspection Reports Scanned and Hyperlinked
- 13 CCTV Videos on Front Street Hyperlinked



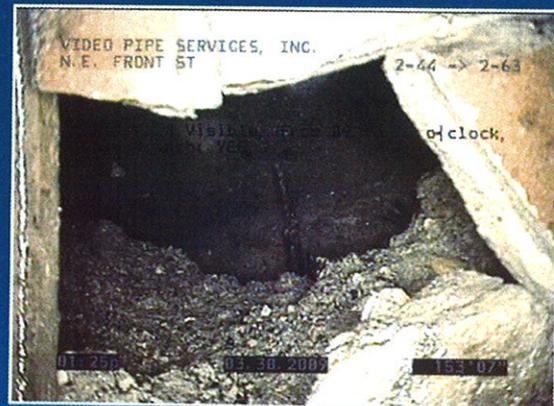
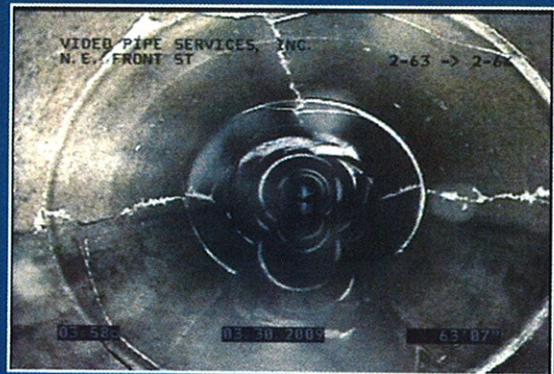
**URS**

# Front Street Investigation

Cleaned and Inspected 2,685 Feet of Pipe Between Truitt Avenue and Kent County PS #7

Serious Structural Issues Encountered (not necessarily I&I related)

Repairs are Underway



**URS**

# Report

## What is I&I?

- INFILTRATION – Groundwater Flow into Cracked Pipes and/or Manholes
  - Always Present with Base Flow
  - Derived Through:
    - Night-time Weir Testing
    - Metering
  
- INFLOW – Stormwater Flow into Manholes and Cleanouts; Roof Drains and Sump Pumps Connected to Sanitary Sewer Pipes
  - Subtract Base Flow Infiltration from Wet Weather Flow

**URS**

## Findings

- Infiltration = 700,000 gpd annual average
  - Annually = 255,500,000 gallons per year
  - Cost (@ \$2.34 per 1,000 Gal) = \$598,000/year
- Inflow = 711,000 gpd per inch of rain
  - Daily = 87,000 gpd annual average
  - Annually = 32,000,000 gallons per year
  - Cost (@ \$2.34 per 1,000 Gal) = \$75,000/year

**URS**

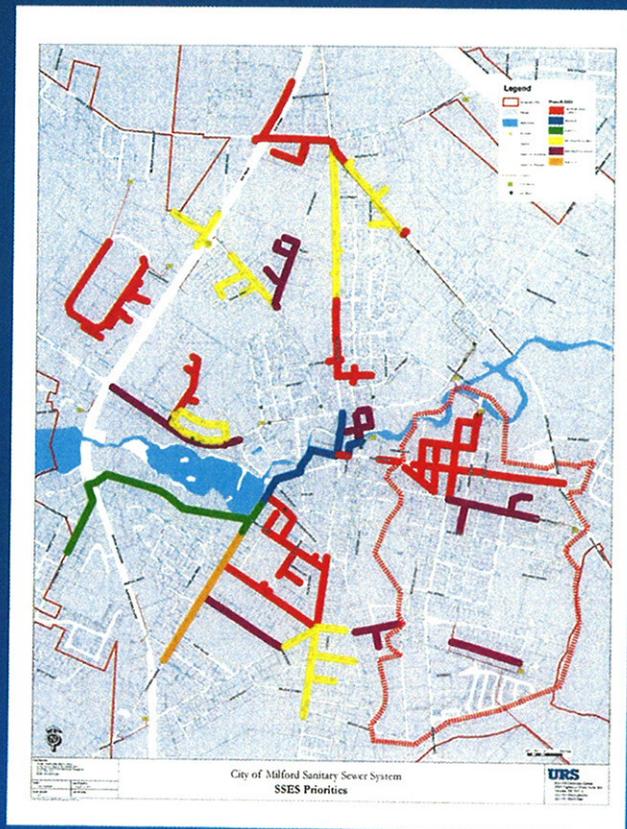
## Next Step - Phased SSES

- Locate and Identify the Problems
  - Closed Circuit Television Inspection
  - Smoke Testing
  - Manhole Inspections
- Determine Appropriate Corrective Measure
- Prepare Construction Documents and Cost Estimates
- Bidding
- Construction

**URS**

# Priorities

- High Priority Areas & Basin 6 - Red
- Basin 5-010 - Blue
- Basin 1-031 - Green
- Secondary Priority Areas A - Yellow
- Secondary Priority Areas B - Purple
- Basin 1-035 - Orange



**URS**

# Weir Testing

- Total Weir Test Flow Findings 700,000 GPD

NOTE: This Table Shows the Weir Test Results Used to Define Priorities

Basin	Pipe Diameter	Length 6-8-10	Length 12-15	InchDia / Mile	GPD	GPD / InchD/Mile
3E	8" - 10"	849		1.5	42,000	27,803
1G	10"	2,028		3.8	60,830	15,835
2C	6" - 10"	3,499		5.6	65,020	11,618
3C	8" - 10"	1,572		2.6	24,904	9,749
2B	8" - 10"	1,700		2.7	13,780	5,165
2I	8"	1,502		2.3	11,290	4,962
6A	8" - 12"	6954.67	17	11.3	53,544	4,732
4F	8"	80		0.1	500	4,135
1C	8" - 12"	4387.894	404	8.2	30,370	3,723
4B	6" - 10"	4,194		6.3	21,588	3,454
2E	8" - 10"	2,261		4.1	11,180	2,728
2A	6" - 10"	1,488		2.5	5,967	2,384
4E	8" - 10"	2,309		4.1	9,075	2,192
3A	8" - 10"	2,711		5.1	11,180	2,184
2N	8"	2,018		3.5	7,301	2,114
1H	8" - 10"	3,882		6.4	13,460	2,109
1F	8"	1,602		2.4	4,690	1,932
5A	8" - 12"	1301.295	286	2.6	5,000	1,907
6F	8" - 10"	2,805		4.5	8,629	1,902
5G	8"	1,097		1.7	3,032	1,823
2F	8" - 10"	2,229		3.4	5,967	1,752
6H	6" - 15"	2358.501	491	4.8	7,455	1,540
6P	8"	1,230		1.9	1,916	1,028
2M	8"	3,005		4.2	4,237	1,019

## Path Forward

- Year 1 - High Priority Areas & Basin 6 – Red
  - Repair Projects
- Year 2 - Basin 5-010 – Blue
  - Repair Projects
- Year 3 - Basin 1-031 – Green
  - Repair Projects
- Year 4 - Secondary Priority Areas A - Yellow
  - Repair Projects
- Year 5 - Secondary Priority Areas B - Purple
  - Repair Projects
- Year 6 - Basin 1-035 – Orange
  - Repair Projects

**URS**

# Questions



**URS**