

MINUTES  
TOWN OF PITTSBORO  
BOARD OF COMMISSIONERS  
MONDAY, DECEMBER 11, 2006  
7:00 P.M.

Mayor Randolph Voller called the meeting to order. Brother Jason Saari of the Church of Jesus Christ of Latter-day Saints gave invocation.

**ATTENDANCE**

Members present: Mayor Randolph Voller, Commissioners Max G. Cotten, Pamela Baldwin, Clinton E. Bryan, Jr., Gene T. Brooks and Chris Walker.

Other staff present: Town Manager Sam Misenheimer, Clerk Alice F. Lloyd, Attorney Paul S. Messick, Jr., Police Chief David Collins and Public Utilities Director John Poteat.

**AGENDA APPROVAL**

Motion made by Commissioner Walker seconded by Commissioner Baldwin to approve the agenda as presented and to add to the end of Old Business information on Green Tag Program.  
Vote Aye-5 Nay-0

**CONSENT AGENDA**

Motion made by Commissioner Walker seconded by Commissioner Bryan to approve the consent agenda as presented.

- Minutes of the November 27, 2006 Board of Commissioners regular meeting.
- Rescheduling of Pittsboro Planning Board meeting from January 1, 2007 to January 18, 2007.
- Reappointment of Ms. Freda Marsh to Planning Board – term expired 12/09/06.

Vote Aye-5 Nay-0

Special Presentation: Commissioner Chris Walker on behalf of Mr. Bill Lewis, Manager of Siler City's Wal-Mart presented a check in the amount of \$500.00 to Chief Collins (for the Police Department) from their Safe Neighborhood Award Program.

**CITIZENS MATTERS**

Margaret Farrell – Thompson Street asked the board if they were going to discuss her letter tonight. She was told it was an agenda item.

**OLD BUSINESS**

**STANDARD SPECIFICATION FOR**

## **UTILITY CONSTRUCTION AND PLAN REVIEW AMENDMENTS**

### **Standard specifications for utility construction and plan review amendments – David Monroe and Sam Misenheimer.**

Manager Misenheimer stated the board received the first draft and at the last meeting and the recommended changes have been made (regarding tapping saddles and warranty start up dates).

Mayor Voller stated we no longer will be approving PVC pipe, only ductile iron.

Motion made by Commissioner Cotten seconded by Commissioner Baldwin to approve the standard specification for utility construction and plan review with amendments.

Vote Aye-5 Nay-0

## **SEWER LINE DEDICATION FROM PITTSBORO PLACE PARTNERS**

### **Sewer line dedication from Pittsboro Place Partners: dedication of 8” and 6” sewer line – David Monroe, Town Planner.**

Manager Misenheimer stated in the absence of Mr. Monroe, the board has received a summary from Planner Monroe.

Planner Monroe had submitted the following information regarding this matter:

At the last meeting the Pittsboro Place Partnership had requested the town to consider accepting the dedication of an easement across the former Fox property for a sewer line that is located there. A portion of that line is 6 inches and a portion is 8 inches. Some reservation was expressed about the Division of Water quality permitting a public sewer to be less than 8 inches in diameter.

The Partnership has modified its request to separate the two sizes of sewer and seek their dedication independently. He has tried to contact Ken Schuster at the Division of Water quality but he has left the department. Jay Johnston is pursuing other contacts that may be able to advise us on this matter.

Planner Monroe’s suggestion is that the town go ahead and accept the 8 inch line, but only consider the stretch that is now 6 inch if it is upgraded to 8.

Motion made by Commissioner Walker to accept the 8” line on the property owned by Bill Jackson and his group (Pittsboro Place Partners) and table the portion of 6” line until Altadore can be contacted and issues if any are resolved, seconded by Commissioner Cotten.

Jay Johnston stated with regard to the 6” section the Town has not been addressed to my knowledge with a plan for build out capacity. When that sort of plan would come to

Town Hall for review, downstream capacity would be taken into consideration and it could be and he doesn't know. It could be it would not have enough carrying capacity. So if there is a decision with regard to the 6" piece, it should be considered with build out capacity in case it needed to be more than 6."

Commissioner Walker asked if that would be the same for the 8". Mr. Johnston said exactly, a precedent might be Powell Place where the outfall they feed into was given great scrutiny from its build out capacity and they got in just under.

Commissioner Walker amended his motion to accept the 8" line on property owned by Pittsboro Place Partners and that if 8" does not satisfy at build out they will look at expanding that line to the proper size to carry the flow that may be necessary and to table the 6" portion until Altadore can be contacted and issues, if there are any can be resolved.

Vote Aye-5 Nay-0

### **REQUEST FROM MARGARET FARRELL**

#### **Storm water management issue: Request by Margaret Farrell at 591 Thompson Street to address flooding along Thompson Street.**

Mrs. Margaret Farrell submitted the following letter to the Mayor and Board Members (letter dated November 6, 2006):

As I have previously made you aware, my property on 591 Thompson Street as well as Thompson Street have been subjected to severe flooding every time it comes a good rain. This is the result of the development of Chatham Forest.

I brought this matter to the Town Board in 2001. Town Manager Hugh Montgomery and Mayor Chuck Devinney brought this to the attention of Mr. Voller, owner of Chatham Forest. Mr. Voller's engineer drew up a plan; however, this plan was put on hold, and the town got a new Manager, David Hughes, and Mayor Nancy May. Absolutely nothing was done to correct this situation and the flooding continued. Each time it flooded I called the Town and asked them to come look at the water, but no one came or called.

On July 24, 2004 I sent a letter to David Hughes and the Town Board regarding this matter. The answer I got was "This is a private matter. The Town has limited statutory authority to take action and no authority to take enforcement action". I was told the Town of Pittsboro does not have a local sedimentation policy and does not have the authority to enforce these regulations.

Mr. Voller had his engineer draw up a plan to grade the Joe Taylor Road and run the water down the ditch and back to the covert behind Lee Trimble's house. This worked fair. The water went back to the covert, hit the stream, under Thompson Street and on the Roberson Creek and then to Jordan Lake.

In August of 2004 Town Manager, David Hughes, decided to have the Town workers dig a big ditch that extended down Thompson Street on my property, so the flood water could run down the highway, flood my bottom land, then hit the stream going under the road and to Roberson Creek and then on to Jordan Lake.

There has been no consideration or thought to the flooded street, which has to be barricaded and closed, the interruption of traffic, the mud, pollution, destruction by flood water, sedimentation and erosion. The ditch is a breeding place for mosquitoes and is littered with beer cans, trash and growing weeds. Our environment is polluted with Chatham Forest yard chemicals and pollutants as the water flows across the ground. The floodwater is washing all the topsoil away and polluting everything as it goes. It is any wonder that the water of Pittsboro is polluted?

Once again I am asking for your assistance in correcting this matter. It is a known fact that clearing land for construction projects causes damage to the soil through erosion. A plan to control this should have been in place prior to the start of this development. Our land is a valuable resource and we need preventive measures in place to protect it.

Sincerely,

Margaret Farrell

Manager Miseneheimer stated the Mayor and Board Members, Planner Monroe and himself received the above referenced letter from Mrs. Farrell and therefore it is before the Board tonight. He wanted to let her know that the stormwater issues will be a continual item the board will have to address as we go. The Phase 2 Storm Water Regulations will be effective in July 2007. We have incorporated that into our standards and specifications.

Mayor Voller stated we also have flood maps that Planner Monroe has been working on with FEMA that will become in effect.

Samir Bahho stated there are two sub basins (stormwater) that are coming from Chatham Forest. One of them goes directly into the 24" culvert. Mayor said it is directly next to the basketball court. It goes to the west of Ms. Trimble's house. There is a defined ditch that goes there and this comes from the Trimble piece that we have on Chatham Forest. The other one is a bigger one that comes through east of Ms. Trimble. It doesn't take any water from Chatham Forest. It takes it from all the development on Fire Tower Road, it comes down and splits Cynthia Drive and goes under the road and comes east of Ms. Farrell.

He stated he looked at this area and at one time he wrote Mrs. Farrell a letter. She mentioned that he had gone there and met her and Ms. Trimble and some other properties and he went up to the north to see where the water was coming from. He suggested at that time to dig a channel on both sides of the driveway to get the water and put some pipe under the driveway so the water will go into the 24" line. He saw the picture or the

flooding Mrs. Farrell took. Some of the water is coming from the east and probably from this big drain here (he pointed on the map) which is east of Mrs. Farrell, and crossing to the west maybe because there is not enough capacity in the culvert under Thompson Street. I have not studied the capacity of the 42" DOT box culvert. But he studied the 24" and before any development was there it was undersized. What might happen is when the water collects into this area and you have boxes that cannot take all the water it just ponds on the neighbor to the other side until the pressure takes the water down. He talked to the Town at that time and they said this happens maybe 2, 3, 4 times a year.

Mayor Voller stated (to Mr. Bahho) he knows from speaking to Mrs. Farrell and reading her letter that one of the questions she had was your design had water going down to the 24" culvert (Mr. Bahho said yes) and then it was redesigned to perhaps because the thought was there was too much water coming down there and they wanted to separate it, sending water to the DOT box culvert and other there and that is kind of what the pictures are showing (Mr. Bahho said this was studied by Mr. David Hughes and he remembers the town doing some channel digging and they put a pipe under the driveway, from the picture the channel is overflowing probably because there is not enough capacity in the pipe under Thompson Street).

Mayor Voller asked Mr. Bahho for his recommendation – Mr. Bahho said the capacity of these two pipes would have to be studied first and they may need to be increased in size.

Commissioner Cotten asked how the water gets off the main drive going into Chatham Forest. It looks like to him that it is coming out on Thompson Street instead of going into a drainage ditch. Mr. Bahho said there is not much water coming out of Chatham Forest but across on Thompson Street there is a 10" pipe and there is a catch basin on the first street to the left. Commissioner Cotten stated there is no doubt there is a problem due to the fact that the water is coming from three different directions and its meeting right there where the pipe is going under Thompson Street.

Commissioner Walker asked about the storm drains that are set up on the road, once it goes down the storm drain it is piped correct – Mr. Bahho stated one is on Cynthia Drive to the east of Mrs. Farrell and under Thompson Street there is a 42" box culvert, this is what is coming from 300 ft in Chatham Forest.

Mrs. Margaret Farrell stated she is concerned it is going to flood her house. It has flooded Lee Trimble's house twice. The culvert needs to be cleaned out or the water can not go under the road like it is suppose to, the water is designed to come down the road and it should be designed to go under the road. It is washing all her yard away. She stated she tried to get the housing project stopped before it was completed but you didn't listen.

Commissioner Bryan asked Mrs. Farrell if it was working one time. She said it was when it was going to the culvert behind Lee Trimble's house that worked pretty good. Commissioner Bryan asked if that was before the present building was built at the basketball court. Mrs. Farrell stated she don't know. Commissioner Bryan said he

thought at one time there was a catch basin down there that was stopping that water. Mrs. Farrell said the water use to come down the culvert behind Lee Trimble's house, but this is a new stream created by Chatham Forest that comes down the road, it's just like a creek bed. Commissioner Bryan said it seems that it was something done on the Chatham Forest side (he don't know) that upset this water flow. Mrs. Farrell said the trees were all cut. Commissioner Bryan said why that could not be corrected.

Mayor Voller stated Mr. Hughes (he tried to do the right things so you should not be throwing the bucks) he was worried that if you over burden one side he wanted to split it.

Mrs. Farrell stated she tried to get them to stop the housing project before it was completed because of flooding but the town would not listen.

Mayor Voller stated he would think one answer would be over sizing the culvert and running the water back towards the basketball court.

Mrs. Farrell said and to clean out the culvert.

Commissioner Bryan said that anytime you move dirt to put houses on it you are going to create some water flow, so that's the purpose of the environmental stuff to stop the water flowing. So it seems like to him the answer would be to get that water stopped and its going right back to Chatham Forest, they are the ones that stirred it up and they should fix the problem.

Mayor Voller stated this part here was done by the town not by Chatham Forest.

Commissioner Bryan stated that was what he was trying to find out who did it and why it can't be undone. This has been going on for a long time.

Mayor Voller stated the Town would have to authorize Chatham Forest to redo something the town has done.

Manager Misenheimer stated we need to get NCDOT involved also.

Mayor Voller stated it is really a simple thing to do – grading.

Motion made by Commissioner Brooks seconded by Commissioner Bryan to make the repair.

Commissioner Baldwin asked Mr. Poteat if he has been there to look at the situation.

Mr. Poteat said yes; he stated about three months ago when there was a water leak we had a track hoe operator clean out the culvert pipe at that time, we got a big rain after that and it flooded again. What happens is the pipe is so small it sends all that debris down and clogs it up. The only pipe he remembers the town putting in is the corrugated pipe.

Vote     Aye-5     Nay-0

## **GREEN TAG PROGRAM**

Lyle Estill said he was interested in seeing the Town of Pittsboro invest in energy credits and suggest the Town buy into this program. He will act as the broker and buy through Piedmont Biofuels. It will put the town in a leadership role with green energy and you won't regret it.

Mayor Voller said Mr. Estill will be providing this service purely gratis for the Town at no cost and would be a symbolic first for the Town. It would be an offset of fuels purchased in 2006.

Commissioner Cotten said he thinks there are some legal issues we need to explore and would make a motion to table this until we receive the necessary answers, he is every concerned about the legal issues. He is not sure a public body like us can invest in a private organization.

Mr. Estill said it has been done in Denver and Chicago. He stated all the town would be doing is issuing a purchase order for renewable credits – there are no legal issues involved.

Chris Walker said this is something new, they were given some information from wiyk-i-pedia that he has read over. He doesn't know about legal issues but at this point and time (he commends what Mr. Estill is trying to do). What he would like to see us do is continue dialogue over x number of months or how ever long it takes until they get a full understanding of these things. He just doesn't know enough about it to spend \$20,000 of town money at this point and time. Certainly he thinks we ought to look at it. He would also like to talk with Progress Energy to see how it would affect us in other issues that may be involved – street lights for example.

Mr. Estill stated he would like to suggest if we wait we are going to wake up and read that Carrboro beat us to the point.

Commissioner Bryan seconded Commissioner Cotten's motion.

Commissioner Baldwin said it should be investigated with Progress Energy. This is very new to her also, although it sounds like a great idea.

Commissioner Walker said if Carrboro beats us so be it, we have limited resources.

Commissioner Brooks said there is a mill base at Bynum that was operated a few years ago and they sued Pittsboro because they said we diverted too much of the water. Who would operate that under this arrangement? Mr. Estill said a private company.

Commissioner Brooks said they would be responsible for maintenance and meeting state and federal regulations. Mr. Estill said yes. Commissioner Brooks asked how the power

would be delivered to town. Mr. Estill said the power is tied to the grid and the operator is paid through a power purchase agreement for the utility they are hooked up to (i.e. Progress Energy, CEMC, Randolph Electric, etc.)

Commissioner Cotten called for a vote on his motion.

Vote Aye-5 Nay-0

## **NEW BUSINESS**

### **DEDICATION OF INDUSTRIAL PARK DRIVE**

#### **Dedication of Industrial Park Drive – Sam Misenheimer.**

Manager Misenheimer stated Mr. Anhut is here and he asked him to make a presentation. He asked if this is a state road.

Mr. Anhut stated it is his understanding that the Town has an easement for the maintenance of Industrial Drive, the road has not been dedicated to the Town and that is what they were hoping to do tonight. It is on the agenda at the recommendation of Dave Monroe that we dedicate the road for maintenance in the future. It is a 60' right-of-way from 64 to the previous Richard Fox property, there is a gravel drive that connects to the end of Industrial Drive and heads over to Piedmont Biofuels property. This is for the paved portion of Industrial Drive.

Motion made by Commissioner Brooks seconded by Commissioner Walker to accept the dedication of Industrial Park Drive.

Commissioner Walker asked if the road is up to standard.

The road was built to NCDOT standards in 1986.

Mr. Anhut said they have reserved an addition 40 feet for improvements of Industrial Drive at the appropriate time at which time they would dedicate it.

Vote Aye-5 Nay-0

## **PROPOSAL – SEWER COLLECTION SYSTEM MASTER PLAN**

### **Proposal for Sewer Collection System Master Plan by HydroStructures, Inc. – Jay Johnston.**

Proposal:

December 4, 2006

Mr. Sam Misenheimer

Town of Pittsboro  
P.O. Box 759  
Pittsboro, NC 27312

**Re: Proposal for Sewer Collection System Master Plan  
Town of Pittsboro, North Carolina**

Dear Mr. Misenheimer:

After the Board of Commissioners meeting on November 13, 2006, the Town of Pittsboro asked Hydrostructures, P.A. to prepare a proposal for a Sewer Collection System Master Plan. Over the past six years, the Town has often struggled with the notion of sewer collection system planning, but has managed via the plan review process conducted by Hydrostructures each time a developer submits plans to the Town for consideration. In essence, sewer system planning has been piece-mealed together on a project by project basis. This has become increasingly difficult for both the Town and Hydrostructures as more developments have come on line, reducing (using) the capacity in many lines, using more of the treatment capacity, eliminating some routing options and requiring much greater considerations such as the paralleling of some existing outfalls.

Preparing and utilizing a comprehensive Sewer Collection System Master Plan will help to improve the Town's planning efforts and increase the efficiency of certain aspects of the review process.

**Project Understanding**

The Town is currently undertaking a very important sewer system mapping update project that will greatly help in sewer system planning. This would be a primary step in any sewer master plan and can be used as a cornerstone to a collection system master plan.

The Town needs to pull together key information including zoning and planning maps, the sewer collection map, and all available information relating to potential future development in and around the Pittsboro planning corridor to create a comprehensive collection system planning document or master plan.

The master plan will provide a guideline for future development, highlighting development areas, providing estimates of future flows, and illustrating the future needs in key areas of the sewer collection infrastructure. This last item is probably the most important aspect of the master plan for it shows where system deficiencies are (or will be as more flow is applied). This information is then used to plan, design and budget for the improvements needed to accommodate growth.

**Scope of Services**

1. Hydrostructures will coordinate the planning document efforts described herein with the current mapping update project, ensuring that all pertinent information is incorporated and shared between the two project efforts, strengthening both deliverables.

2. We will collect available planning and zoning maps from the Town of Pittsboro and, where applicable, from Chatham County. The County's GIS site can be a source of good information and data.
3. We will interview the Town planning staff to compile as full an understanding of the development horizon as can be made at this time. This information will be used in formulating future development area mapping and flow projections for future development.
4. Using accepted guidelines for projecting future sewer flow rates, we will calculate projected flows and formulate reasonable build-out scenarios.
5. Combining the mapping and the flow scenarios, we will evaluate the impact on the receiving systems. This work will draw heavily on the sewer mapping update effort. Pipe grade information from the mapping effort will be input into a simple spreadsheet model to evaluate line capacities. Line capacity information will be reported and represented on maps included in the written report.
6. The capacity evaluation described in Item 5 will reveal potential problems areas. Where potential problem areas are observed, we will perform simple preliminary engineering evaluation to formulate reasonable solutions, which will typically include paralleling existing sewers, upsizing existing sewers, or developing alternate beneficial routes to accommodate flow.
7. Throughout the plan development process, we will utilize information currently housed at Hydrostructures, such as data from the Inflow and Infiltration Study and both SSEs, plans and as-builts from recent developments, etc. To the extents practicable, we will incorporate all pertinent information currently available to the Town.
8. The analyses, new maps, capacity calculations, alternatives discussion, etc. will be presented in a written report bound in a three-ring binder. The report will be prepared and presented in a manner such that it will be a useful planning resource.
9. We will present the draft-final report to Town staff and incorporate their input into a final report, which we then present to the Board of Commissioners.

### **Additional Services**

As described above, we will attempt to incorporate as much existing, available information into this planning report as possible. Some of this information includes data from the 2002 Inflow and Infiltration Study. *No new flow monitoring is proposed in this scope of services.* However, the 2002 Study did not provide system-wide flow monitoring and the Town could benefit from completing the monitoring effort. Hydrostructures can easily provide this service under separate agreement.

Also mentioned above, we will perform spreadsheet capacity analysis of the key components of the collection system. *We do not propose comprehensive computer modeling of the collection system under this scope of services.* It is our opinion that Pittsboro does not need

this level of analysis. However, should such evaluation be requested, Hydrostructures can easily provide this service under separate agreement.

**Fee Estimate**

We propose to provide the services (including all labor, materials, equipment and other incidental costs except for items listed under Additional Services) discussed above for a lump sum fee of **\$29,750**.

With the authorization of the Town, we will begin coordinating data collection and conducting interview with Town planning staff. Input from Town staff will be sought throughout the process. When we are near completion, we will present preliminary findings and recommendations to the Town and refine the final report for presentation to the Board.

We appreciate the opportunity to assist you with this project. If you have any questions or need any additional information, please give call me at (919) 542-5002, ext. 226.

Sincerely,

**HYDROSTRUCTURES, P.A.**

James N. Johnston, PE  
Vice President – Engineering

Motion made by Commissioner Brooks seconded by Commissioner Cotten to approve the proposal for sewer collection system master plan with HydroStructures, Inc.

Vote Aye-5 Nay-0

**PROPOSAL COMPUTER MODEL UPDATE  
& QUALITY MODELING**

**Proposal for computer model update and water quality modeling –  
HydroStructures, Inc. – Jay Johnston.**

Proposal:

December 4, 2006

Mr. Sam Misenheimer  
Town of Pittsboro  
P.O. Box 759  
Pittsboro, NC 27312

**Re: Proposal for Computer Model Update and Water Quality Modeling  
Town of Pittsboro, North Carolina**

Dear Mr. Misenheimer:

During the Board of Commissioners meeting on November 13, 2006, the Town of Pittsboro asked Hydrostructures, P.A. to prepare a proposal for engineering services to update the Town's distribution system model and to utilize the model to evaluate water quality, especially as it relates to chlorine residual and TTHMs formation. This letter provides an outline of our project understanding and approach, our proposed scope of services and the associated fees for updating the water distribution model and utilizing the model to evaluate distribution water quality.

### **Project Understanding**

In 2002 Hydrostructures performed a distribution model update to evaluate the effect of the proposed Chatham Forest storage tank. A number of significant changes have occurred in the distribution system since 2002 and should be incorporated into the hydraulic model. However, there are a variety of compelling reasons to update and maintain the system model.

1. The hydraulic model is a powerful planning and evaluation tool. With the ever increasing development pressure on the Town, the impact on the distribution system must be evaluated and the needed improvements must be predicted, considered and planned for. The computer model is possibly the most important tool in making these predictions. Without updating and utilizing the model, the Town is extremely limited in predicting impacts on the system, pressure and flow deficiencies, potential negative water quality effects, etc. Using the model, the Town can plan ahead for capital improvements and for requirements to be directed to potential developers.
2. The Town of Pittsboro's water system serves 1250 or more customers and contains approximately 160,000 linear feet of water line, 220 gate valves and 175 fire hydrants. However, significant additions in subdivision distribution and transmission (Hwy 15/501 and Russell Chapel Road) have come online over the past four years and have not been updated in distribution mapping and modeling.
3. In addition to the changes in the distribution system, the Town has recently struggled with elevated TTHM levels and maintaining adequate chlorine residual throughout the system. TTHMs have been enough of a problem to require the Town to distribute public notifications. Evaluating potential causes and sources of TTHM formation within the distribution system compliments the Town's effort in evaluating potential causes and cures at the water treatment plant. Understanding water quality within the distribution system should help to improve the water system flushing program, reduce wasted water or possibly even eliminate the need for flushing.
4. Furthermore, updating and utilizing the distribution system computer model greatly compliments the Town's recent effort to update water system mapping in a GIS database. Each of these efforts will serve to improve upon the other.

### **Scope of Services**

10. Hydrostructures will update the distribution system mapping under a previously approved Scope of Services. This effort will include interviews and field observations with Town staff to confirm system connectivity. This is key to creating an accurate computer model.

11. The updated distribution mapping will be imported into the computer model. Preliminary model runs will be executed to troubleshoot and observe key areas. Next, we will conduct flow tests in key areas of the distribution system to obtain calibration data. Flow test entail flushing water from one or more hydrants, measuring the flowrate(s), and measuring the system pressure before and during the flow test. This data is used to calibrate the computer model to actual system.
12. Once the computer model is updated and calibrated, we will model system performance under a variety of flow scenarios including static conditions (as a baseline), average daily demand conditions, and fire flow conditions in key areas (downtown, major subdivisions).
13. In order to predict the impact on the distribution system of large scale development, we will prepare demand scenarios for potential future development in key areas of the service area. We will coordinate with Town planning staff to ensure that all key scenarios are considered. The demand scenarios will be input into the model to evaluate the potential impact of proposed subdivisions, primarily including Rivers Oak and others in the northern area of Town and potential large development in the east and southeast area. Evaluating these demand scenarios will help to plan for infrastructure improvements that will be needed to support and serve these key growth areas.
14. Model runs will be performed to evaluate water quality within the distribution system. These model runs will help to assess the changes in water quality as the water moves through the system and the impact of residence time, etc. Modeling in this fashion will help to predict where low chlorine residuals will occur and where TTHM formation peaks (if it is occurring in the distribution system). Furthermore, the model will help with system operation recommendations that may improve water quality and water system management.
15. Modeling results will be presented in a written report. The report will include modeling methods and results. The report will highlight the impact of future development and provide recommendations on system improvements needed to adequately respond to increased demands. The report will also elaborate on water quality issues as they relate to the distribution system and its operation.
16. These results will be presented to staff and the Board of Commissioners.

### **Fee Estimate**

We propose to provide the services (including all labor, materials, equipment and other incidental costs except for laboratory sampling and analysis) discussed above for a lump sum fee of **\$24,725**.

With the authorization of the Town, we will begin coordinating this project effort with the mapping update project to maximize the work effort. Preliminary matters such as confirming connectivity and collecting flow data will also be started. Modeling will commence when mapping efforts are completed and the piping network can be imported into model. Town staff will be involved throughout the process. When we are near completion, we will present

preliminary findings and recommendations to the Town and refine the final report for presentation to the Board.

We appreciate the opportunity to assist you with this project. If you have any questions or need any additional information, please give call me at (919) 542-5002, ext. 226.

Sincerely,

**HYDROSTRUCTURES, P.A.**

James N. Johnston, PE  
Vice President – Engineering

Motion made by Commissioner Brooks seconded by Commissioner Baldwin to approve the proposal for computer model update and water quality modeling with HydroStructures, Inc.                      Vote Aye-5    Nay-0

Staff Reports/Manager updates

- Town employee Christmas luncheon on Friday, December 15, 2006 @ 11:30 AM (Board members to arrive at 11:15 AM).
- Town Hall closed for holidays – Monday, December 25, 2006, Tuesday, December 26, 2006, and Monday, January 1, 2007.
- House Bill 917 – Amendments concerning local governments in Orange and Chatham Counties. (enabling legislature to impact fees). Attorney Messick stated this has been on the books for 20 years the town received the authority at the same time the County did. The County uses theirs for schools. He stated it is available if you want to develop an ordinance to do that for a specific purpose. Before taking any action you would have to do a study that would determine the cost associated with the type you choose. Mayor Voller stated there is a movement a foot with the county to pursue the 1% land transfer tax, he is not sure it will go through this year or not. In his opinion the county should drop the impact fees for the 1% land transfer fee so each municipality in the county should receive a portion of that.
- Time Warner Cable letter pricing updates.

### **COMMISSIONER CONCERNS**

Commissioner Brooks stated once again Bob McConnaughey came through with information in regards to chloramines in the drinking water. If we had to pay him it would be very expensive.

Commissioner Brooks read some excerpts from a Study done at Duke University on Goldsboro and Wayne County. ...in some instances this has coincided with an increase in lead levels in drinking water in those systems, lead in drinking water can be a sufficient health factor primarily concerned about children. ...Lead piping was uncommon after the 1930's but lead soldering was common and legal until 1986 and some plumbing fixture today contain lead.

Commissioner Brooks asked that this study be copied for the Board Members and a few extra copies be made.

Commissioner Brooks stated we need to communicate with the people and he doesn't know how well we are communicating – some of the people he has talked with in the community that should have already been informed didn't know about it – like Biolex and some others. They would definitely be affected by the change. He thinks we should offer to pay for anyone that has an older home if they want their water tested from an independent agency. We should be user friendly and do something financially to help people convert. If we are going to switch to this system we need to do everything we can to protect our citizens.

Mayor Voller stated maybe staff can look at grants with the Clean Water Trust Fund.

Manager Misenheimer stated that he, Mr. Poteat and Mr. Efird would be going to a class about chloramines later this week.

Commissioner Brooks stated he would like for us to send Mr. McConnaughey a letter of appreciation. The board agreed.

Commissioner Bryan thanked the staff for all their work for the Christmas Parade.

Attorney Messick was asked if he had received a response from Toll Brothers and he said yes and no – they have been playing phone tag.

FYI

- Letter to Chief Collins regarding Stacey Edwards
- New police cars delivered – Friday, December 1, 2006
- NCLM Environmental Briefs – November 2006
- Safe Routes to School updates – November 2006

**ADJOURNMENT**

Motion made by Commissioner Brooks seconded by Commissioner Bryan to adjourn.  
Vote Aye-5 Nay-0

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Randolph Voller, Mayor

ATTEST:

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Alice F. Lloyd, CMC, Town Clerk