

**ATTACHMENT A**

**A RESOLUTION APPROVING WASTEWATER TRANSFER FROM BLENHEIM WOODS  
DEVELOPMENT IN DURHAM TO OWASA WASTEWATER TREATMENT FACILITIES  
Resolution No. 56/2007-08**

WHEREAS, Durham's Department of Water Management has requested that the new Blenheim Woods development be allowed to direct its wastewater to OWASA wastewater treatment facilities, and

WHEREAS, the Carrboro Board of Aldermen's approval of this transfer is required (for it to move forward) by the interlocal *Water and Sewer Management, Planning and Boundary Agreement*, and

WHEREAS, OWASA will recover all costs associated with this proposed transfer, and

WHEREAS, OWASA staff foresee no negative consequences for accepting this transfer and strongly recommend approval of the transfer, and

WHEREAS, Durham has often assisted the Chapel Hill – Carrboro community in similar types of situations,

**NOW THEREFORE BE IT RESOLVED BY THE BOARD OF ALDERMEN OF THE TOWN  
OF CARRBORO:**

Section 1. The Board of Aldermen of the Town of Carrboro do hereby approve this transfer.

Section 2. This resolution shall become effective upon adoption.



# ORANGE WATER AND SEWER AUTHORITY

*Quality Service Since 1977*

November 9, 2007

Chair Moses Carey, Jr.  
Orange County  
Post Office Box 8181  
Hillsborough, NC 27278

Mayor Mark Chilton  
Town of Carrboro  
301 West Main Street  
Carrboro, NC 27510

Mayor Kevin Foy  
Town of Chapel Hill  
405 Martin Luther King Jr. Blvd  
Chapel Hill, NC 27514

**SUBJECT: PROPOSED TRANSFER OF WASTEWATER FROM THE CITY OF DURHAM TO OWASA FOR THE BLENHEIM WOODS DEVELOPMENT**

Dear Chair Carey, Mayor Chilton and Mayor Foy:

This letter outlines OWASA's strong support and recommendation for your approval of the City of Durham, Department of Water Management's request that OWASA accept wastewater flows from the development of a parcel of property on the west side of George King Road (immediately adjacent to the Durham/OWASA service boundary). Your approval is required in accordance with the interlocal *Water and Sewer Management, Planning and Boundary Agreement*.

**BASIS FOR OWASA'S RECOMMENDATION FOR APPROVAL:**

- ✓ Durham, like OWASA, strongly prefers gravity sewer collection systems because they avoid the increased operational and maintenance costs, increased likelihood for spills and potentially adverse environmental consequences and increased noise and light pollution associated with pump station/force main arrangements.
- ✓ Approval, or disapproval of this request has no "growth" implications for this area. The Blenheim Woods development has already been approved by Durham and will happen, with or without a gravity sewer connection to the OWASA system.
- ✓ Durham has confirmed that this is a "one of a kind" request and that they anticipate making no similar requests to OWASA in the future.
- ✓ There are no policy or service boundary adjustment implications. Current policy allows approval of the request and no boundary adjustments are involved.
- ✓ If approved, OWASA will recover all costs associated with this proposal as part of a written agreement between OWASA and Durham.
- ✓ Under an existing agreement requested by the Orange County Board of County Commissioners and OWASA, Durham currently accepts wastewater flows from 59 OWASA customers in the Piney Mountain Subdivision in Orange County.

- ✓ We believe approval of the proposal is appropriate because it is important that all water/sewer utilities in the region mutually support one another when it is feasible to do so (it is important to remember that Durham was standing by to provide OWASA with finished water if it had been necessary in the aftermath of the August 8, 2007 fire at OWASA's Jones Ferry Road Water Treatment Plant), and that Durham has assisted the Chapel Hill-Carrboro community many times during past droughts and emergencies.

**BACKGROUND**

The City of Durham has executed an agreement with a developer, East West Partners Management Company, to provide water and sewer services to the Blenheim Woods development that will include 57 residential lots and connect Kinsdale Drive in the Oaks subdivision to George King Road. Attachment A shows the area to be developed and its proximity to the OWASA-Durham Service Area Boundary.

Durham has requested that the development be allowed to connect to the OWASA sewer system to avoid the construction of a pump station that would otherwise be needed to convey the wastewater from this new development to the gravity flow portions of Durham's collection system. Durham's request is included as Attachment B.

If this request is not approved, the developer would build a new wastewater pump station adjacent to the Chapel Hill corporate limits. Increased energy would be required to operate the station. Future failure of the station due to power outages or equipment malfunctions could result in the release of untreated wastewater.

**DISCUSSION**

OWASA believes that an agreement could be reached with Durham for OWASA to accept and treat the wastewater flows from the Blenheim Woods development through an arrangement similar to the one already in place for the Piney Mountain Subdivision, where Durham accepts and treats wastewater from OWASA (Orange County) customers in that area. The City of Durham (or the new customers within the proposed subdivision) would be required to pay all OWASA applicable charges for sewer service, including service availability fees and ongoing charges for the collection and treatment of the wastewater received by OWASA.

OWASA would not incur capital costs for construction of the system, and Durham would be treated the same as any other third party developer regarding requirements to connect and introduce wastewater into our system.

The collection system would be built to Durham's standards and specifications up to the point where the actual connection is made with the OWASA system.

Durham would be responsible for all operations, maintenance, repair, and any future replacement of the collection system and its components up to the point where their collection system connects to OWASA's system.

If OWASA were to accept wastewater flows from this development or any other development outside of the OWASA service area, OWASA would be committing the necessary facility capacity and applicable nutrient mass load to meet the needs of that development. That means such capacity and nutrient mass load will not be available to meet OWASA's own customers' needs. That certainly is an important concern, especially in light of the very strict nutrient mass load limits the North Carolina Environmental Management Commission has proposed to protect Jordan Lake water quality. For this particular request from Durham, OWASA staff believe these effects are offset by the fact that Durham previously agreed to accept wastewater flows and nutrient loads from almost the exact same number of residential customers that OWASA serves in the Piney Mountain Subdivision.

Attachment C is a letter from Durham stating that the request being made for Blenheim Woods is the only location where Durham anticipates requesting that OWASA accept wastewater flow from any portions of their service area.

**ACTIONS REQUIRED**

Durham's request represents a "wastewater transfer" according to the *Water and Sewer Management, Planning, and Boundary Agreement*, to which OWASA is a party along with Carrboro, Chapel Hill, Hillsborough, and Orange County (***Section III, Definitions: A Wastewater Transfer is "Any transfer from one wastewater service provider to another wastewater service provider"***).

Approval by the OWASA Board of Directors, the Carrboro Board of Aldermen, Chapel Hill Town Council, and Orange County Commissioners is required per the above-referenced Agreement (***Section VII.C. "Wastewater transfers are only permitted with the approval of the Orange County Board of Commissioners and the elected or appointed boards of the service providers providing the transfer. If OWASA is the service provider, approval must come from the OWASA Board of Directors and the elected boards of Carrboro, Chapel Hill, and Orange County."***).

**CURRENT STATUS**

The OWASA Board of Directors approved and expressed support of Durham's request at their September 13, 2007 meeting.

The past-Chairman of the OWASA Board of Directors, Mac Clarke, presented Durham's proposal and confirmed OWASA's support of that proposal at the September 20, 2007 Orange County Assembly of Governments' meeting. This presentation provided local community leaders with an improved understanding of the rationale behind Durham's request and the basis for OWASA's approval and support of the proposal.

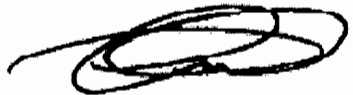
Proposed Wastewater Transfer from Durham  
November 9, 2007  
Page 4

Many of the questions posed during these meetings, and other less formal inquiries, are addressed in Attachment D.

**CLOSING**

For the reasons outlined above, OWASA requests your approval of Durham's proposal.

Best regards,

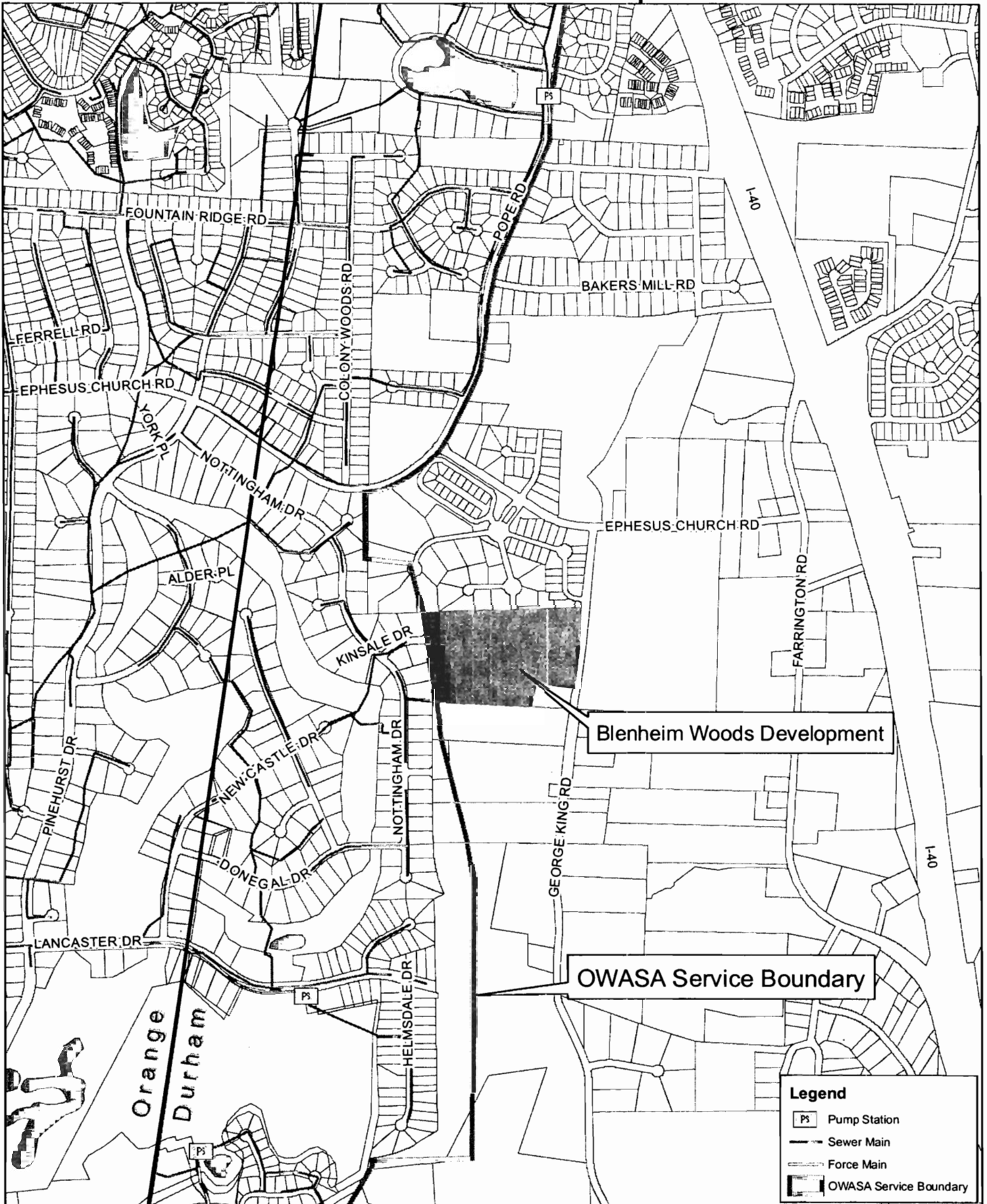


Randy Kabrick, P. E.  
Chair, Board of Directors

**Attachments**

- c: OWASA Board of Directors (w/attachments)
- Ms. Laura Blackmon, Orange County Manager (w/attachments)
- Mr. Roger Stancil, Chapel Hill Town Manager (w/attachments)
- Mr. Steve Stewart, Carrboro Town Manager (w/attachments)
- Ed Kerwin, OWASA Executive Director (w/attachments)
- Bob Epting, Epting & Hackney (w/attachments)

# Blenheim Woods Development



Blenheim Woods Development

OWASA Service Boundary

**Legend**

- PS Pump Station
- Sewer Main
- - - Force Main
- █ OWASA Service Boundary



DURHAM



1869  
CITY OF MEDICINE

**CITY OF DURHAM**

DEPARTMENT OF WATER MANAGEMENT  
101 CITY HALL PLAZA DURHAM, NC 27701  
919.560.4381 fax 919.560.4479  
www.durhamnc.gov

- Administration  
560-4381
- Customer Billing Services  
560-4412
- Laboratory Services  
560-4386
- Plant Maintenance  
560-4388
- Wastewater Treatment  
North Durham – 560-4384  
South Durham – 560-4336
- Water Supply & Treatment  
Williams – 560-4349  
Brown – 560-4362
- Water & Sewer Maintenance  
560-4345

August 6, 2007

Mr. Ed Kerwin  
Orange Water and Sewer Authority  
400 Jones Ferry Road  
Carrboro, North Carolina 27710

RE: Proposed Wastewater Transfer  
Blenheim Woods Development  
George King Rd.

Dear Ed,

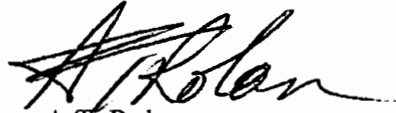
The City has been approached about serving a potential development of a parcel of land on the west side of George King Road. Attached you will find maps showing the proposed development. The parcel is adjacent to the Durham-OWASA service boundary. The project is for 57 lots and connects Kinsale Dr. to George King Rd. The property was annexed into the City of Durham prior to rezoning for the subdivision. The City has executed an extension agreement with the developer to serve the property with water and sewer. In order to avoid having to construct and maintain a small pump station to serve this development Durham is interested in working out an agreement for OWASA to accept the flow from the development and bill the City.

The terrain of the property drains towards the existing sewer in the The Oaks Subdivision served by OWASA. A sewer outfall to serve the development can easily be constructed from the existing sewer in The Oaks. As you know the cost of maintaining pump stations, even small ones, is significant. We currently maintain over sixty pump stations. In addition, pump stations have a much higher risk for failure than gravity sewer. Avoiding a pump station would also be a benefit to the surrounding homeowners by avoiding the noise of the pumps operating, the cycling of the emergency generator, lights from the station at night and avoiding the regular and emergency visits from maintenance crews.

The billing for the development could be combined with the current arrangement we have together for the Piney Mt. subdivision in Chapel Hill that Durham receives flow from. OWASA would be compensated any initial charges, such as capital facility fees, etc., that you normally charge new residential development.

I would be happy to meet with you and your staff to discuss this matter. Mr. Mason Crum and Mr. John Greene of OWASA are aware of this proposal. We would be happy to attend any board meetings necessary to move this issue forward. If you have any questions, please contact me at your convenience.

Sincerely,

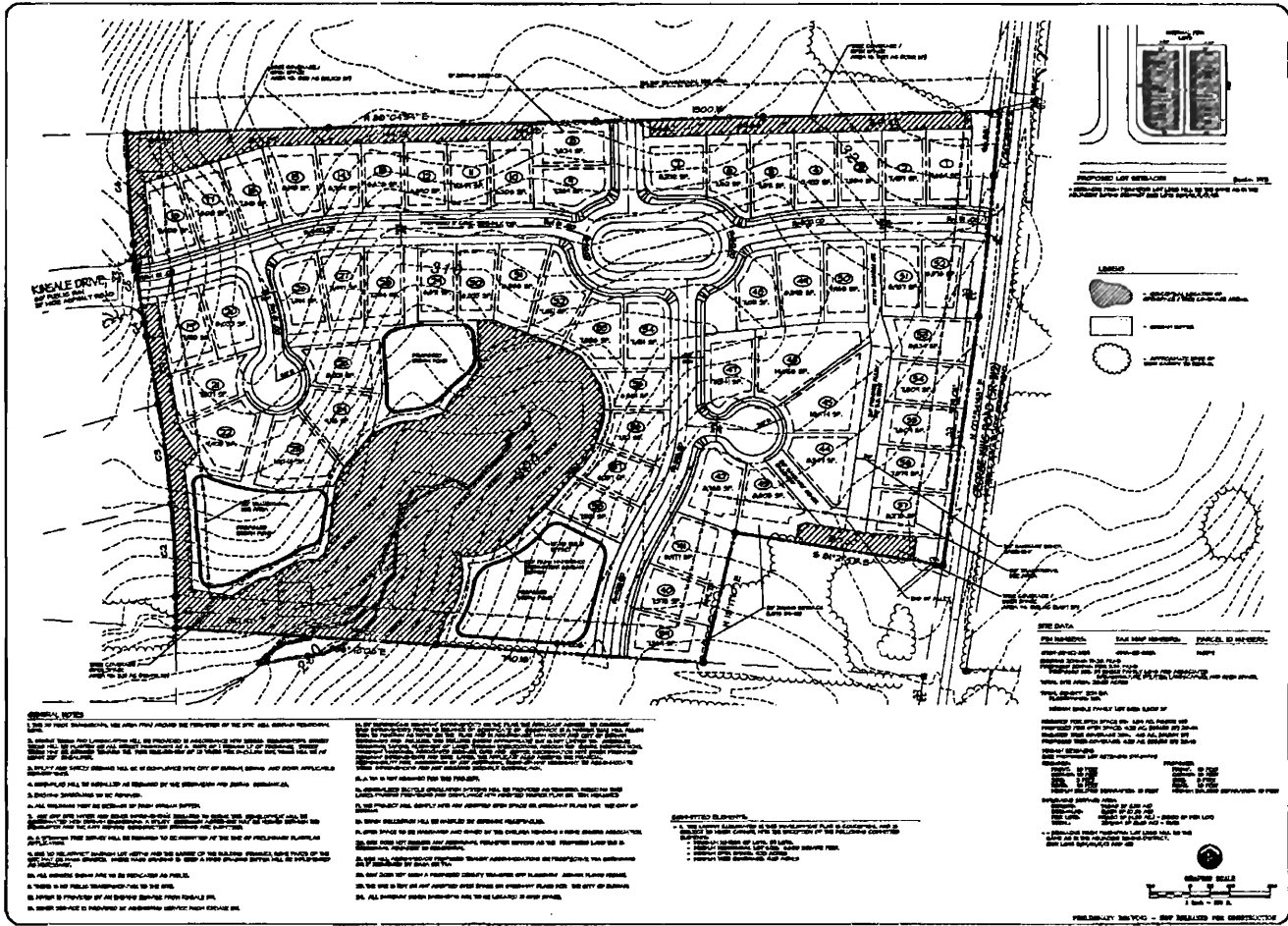


A.T. Rolan  
Director

- Cc: Don Greeley, Water Management  
Jim Harding, Water Management  
John Greene, OWASA  
Mason Crum, OWASA



X:\Projects\SWP\WP-03\010\Plan\Proposed Development Plan\Current Drawing\DWG\DWG0301.DWG, 02/12/08 2:16:11 PM, Maria, 12, 19851



**THE JOHN B. MCDAMNS COMPANY, INC.**  
 10000 WOODBRIDGE DRIVE, SUITE 100  
 DURHAM, NORTH CAROLINA 27703  
 PHONE: 919.488.1100 FAX: 919.488.1101  
 WWW.JBMCDAMNS.COM

**GEORGE KING ROAD**  
 DURHAM, NORTH CAROLINA  
 PROPOSED DEVELOPMENT

**DATE:** 02/12/08  
**BY:** [Signature]  
**CHECKED BY:** [Signature]  
**SCALE:** 1" = 50'

**REVISIONS:**

NO.	DATE	DESCRIPTION
1	02/12/08	ISSUED FOR PERMIT

**PROJECT NO.:** 03010  
**SHEET NO.:** C-2

**GENERAL NOTES:**

1. ALL DIMENSIONS SHALL BE GIVEN UNLESS OTHERWISE NOTED.
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**PROPOSED LOT LAYOUT:**

1. ALL DIMENSIONS SHALL BE GIVEN UNLESS OTHERWISE NOTED.

2. ALL DIMENSIONS SHALL BE GIVEN UNLESS OTHERWISE NOTED.

3. ALL DIMENSIONS SHALL BE GIVEN UNLESS OTHERWISE NOTED.

4. ALL DIMENSIONS SHALL BE GIVEN UNLESS OTHERWISE NOTED.

5. ALL DIMENSIONS SHALL BE GIVEN UNLESS OTHERWISE NOTED.

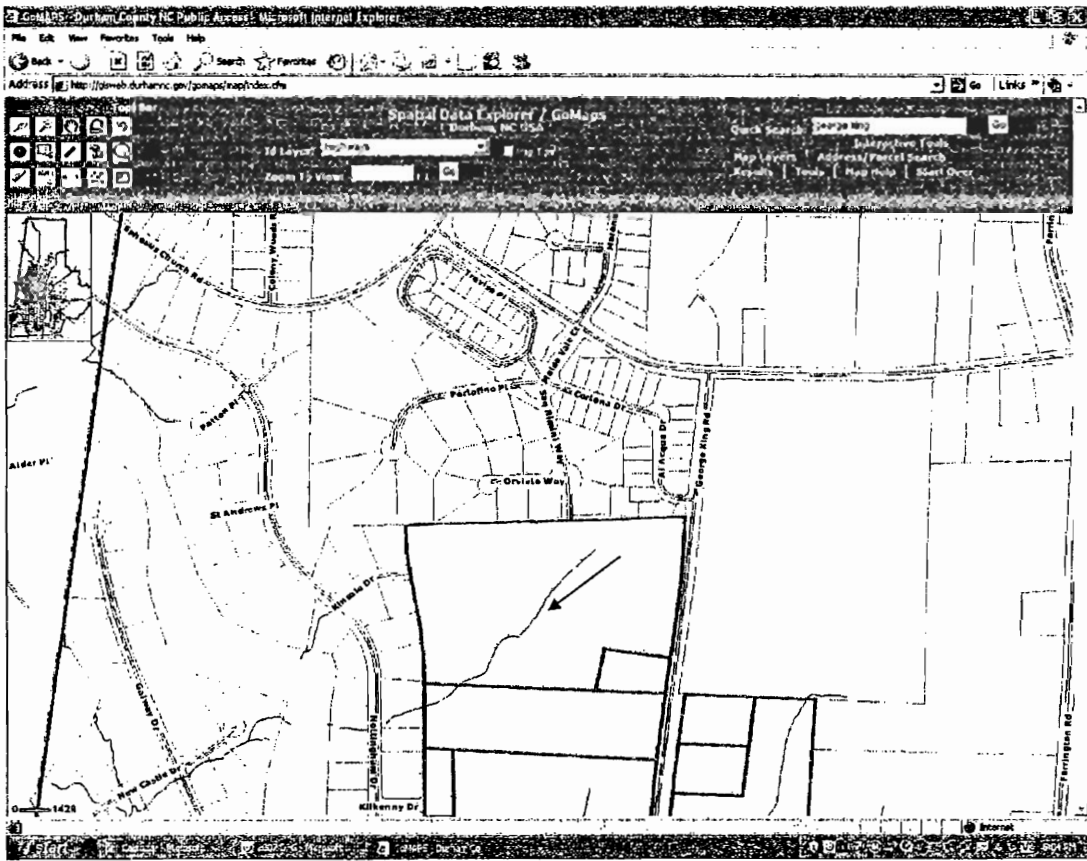
6. ALL DIMENSIONS SHALL BE GIVEN UNLESS OTHERWISE NOTED.

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DURHAM



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DEPARTMENT OF WATER MANAGEMENT  
101 CITY HALL PLAZA • DURHAM, NC 27701  
919-560-4381 • FAX 919-560-4479  
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1869  
CITY OF MEDICINE

September 5, 2007

Mr. Ed Kerwin  
Orange Water and Sewer Authority  
400 Jones Ferry Road  
Carrboro, North Carolina 27710

RE: Proposed Wastewater Transfer  
Blenheim Woods Development  
George King Rd.

Dear Ed,

Thank you for your continued support of OWASA accepting wastewater flow from Durham in order to allow a potential development of a parcel of land on the west side of George King Road. Mason Crum of your office related to us the question from the OWASA board about whether or not there would be any additional requests from Durham in the future. In studying our service area boundary line we do not anticipate the need to make any more requests of this kind in the future.

As you know our service boundary lines runs from Cornwallis Road in the north to the southern Durham County line. In the area south of NC 54 Durham already provides service to property adjacent to the boundary line or the land separating the two service areas is owned by the US Army Corps of Engineers. In the area north of US 15-501 the land adjacent to the boundary line on the Durham side is either already serviced by Durham or tributary back towards our system. For the area between NC 54 and US 15-501 we currently provide service to all the property north of the proposed development. The undeveloped land south of the development (see attachment) will either be serviced by a future pump station located adjacent to Corps Property or by gravity to the Celeste Circle Pump Station.

I will be able to attend the OWASA Board meeting on September 13<sup>th</sup>. If you have any questions, please contact me at your convenience.

Sincerely,

Donald F. Greeley, PE, PLS  
Deputy Director

Cc: Don Greeley, Water Management  
Jim Harding, Water Management  
John Greene, OWASA  
Mason Crum, OWASA

**Questions Raised Regarding the Potential Transfer of Wastewater to OWASA from the Blenheim Woods Development in Durham**

**1. Would a failure to approve Durham's request prevent the Blenheim Woods development from moving forward?**

No. The City of Durham has already executed an agreement with the project developer, East West Partners Management Company, to provide water and sewer services to the new Blenheim Woods development that will include 57 residential lots. Failure to approve Durham's request would simply mean that the area would be served by a sewer pump station and force main rather than the preferred gravity flow arrangement.

**2. Does approval of Durham's request result in a savings for the developer?**

Yes. The construction of a pressurized system and the associated pump station would cost the developer marginally more than a gravity system. However, once the developer completes construction of the system (to Durham's standards) ownership of the system is transferred to Durham which would then be responsible for all future operational, maintenance and repair costs. Durham's request has nothing to do with reducing the initial construction costs for the development. Instead, Durham is making this request so that they can avoid the increased operational and maintenance costs, increased likelihood for spills and potentially adverse environmental consequences, and increased noise and light pollution that comes with a pump station and force main arrangement.

**3. Is this wastewater transfer request from Durham a "one time only" event, or just the first of others that are to follow?**

This is a one time request from Durham. Durham has made it clear that they anticipate making no similar requests in the future.

**4. Who pays?**

Durham and/or its customers will pay all costs associated with this initiative. If Durham's request is approved, it is envisioned that an agreement could be reached with Durham for OWASA to accept and treat the wastewater flows from the Blenheim Woods development through an arrangement similar to the one already in place for the Piney Mountain Subdivision, where Durham accepts and treats wastewater from OWASA (Orange County) customers in that area.

OWASA would incur no capital costs for construction of the system, and Durham would be treated the same as any other third party developer regarding requirements to connect to and introduce wastewater into OWASA's system.

Durham would also be responsible for all operations, maintenance, repair, and any future replacement of the collection system and its components up to the point where their collection system connects to OWASA's system.

OWASA would require payment of the sewer service availability fee when each home is connected to the sewer collection system and the normal sewer commodity rates (per 1000 gallons of usage) that are based on the amount of potable water consumed would apply (OWASA's sewer commodity rates assume 90% of potable water consumed by a household returns to the sewer system for treatment at the Mason Farm Wastewater Treatment Plant). It is worth noting that Durham charges a "Capital Facilities Fee" prior to connection to their system. Their fees are based on meter size, and the cost for a standard residential 5/8" water meter is \$915. OWASA's counterpart to Durham's "Capital Facilities Fee" is the "Sewer Service Availability Fee". OWASA's availability fee charges are based on the size (heated square feet) of the home. OWASA's Sewer Service Availability Fee for a 2,500 square foot home utilizing a standard 5/8" meter is \$3,677.

**5. What size homes will be constructed in the Blenheim Woods development?**

According to the developer, East West Partners, they anticipate that the homes will be in the 1,800 – 3,000 square foot range with most of the homes being around 2,500 square feet.

**6. What has to happen in order for the transfer to occur?**

The first step in the process, OWASA's approval of the initiative, occurred during the September 13, 2007 OWASA Board Meeting. In order for the initiative to move forward it will require the approval of the Orange County Board of Commissioners, Chapel Hill Town Council and the Carrboro Board of Alderman. If all of these approvals are obtained, the final step would be for OWASA staff to enter into an agreement with Durham outlining payment arrangements and each party's responsibilities under the transfer agreement.