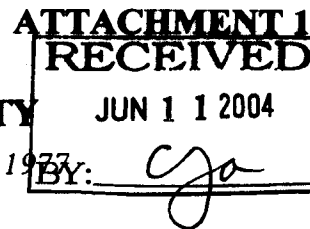


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ORANGE WATER & SEWER AUTHORITY

Quality Service Since 1977



AGENDA #3a(4)

June 11, 2004

Mr. W. Calvin Horton
Town Manager
Town of Chapel Hill
306 North Columbia Street
Chapel Hill, NC 27516

Dear Cal:

**SUBJECT: REQUEST FOR EXPEDITED SPECIAL USE PERMIT FOR THE I-40
WATER BOOSTER PUMP STATION PROJECT**

We are requesting an expedited review for the Special Use Permit needed to construct the I-40 Water Booster Pump Station Project (see attached map). I am writing to summarize the important community and environmental benefits for this project and to explain why it is necessary to begin construction of the improvements early next year.

BRIEF SUMMARY OF PROJECT OBJECTIVES

Background

The Orange Water and Sewer Authority (OWASA) has two water supply interconnections with the City of Durham to provide potable water to the OWASA service area in the event of an emergency situation that would limit the capabilities of OWASA's water treatment and distribution system. Pumps are required to boost the water pressure for the emergency transfer of the potable water because the OWASA water distribution system is at a higher elevation than the City of Durham's system. OWASA has determined that it is highly desirable to increase the amount of water that the Chapel Hill and Carrboro communities could receive from the City of Durham during a water supply emergency. OWASA also maintains emergency only interconnections with the Town of Hillsborough and Chatham County.

Improve Redundancy Capability

- The I-40 Water Booster Pump Station is an integral part of OWASA's plan to provide a redundant supply of potable water to its customers. Providing an emergency interconnection with the City of Durham is the most cost-effective way to provide redundancy to the Jones Ferry Road Water Treatment Plant.
- OWASA has a maximum transfer rate of 3.7 million gallons per day (mgd) from the City of Durham with existing facilities. This represents less than half of the average daily demand for our system. This project, along with a second pump station to be constructed in the future, will increase the transfer capacity to 9.6 mgd which is approximately equal to the current average daily demand. Should anything happen to limit the capacity of OWASA's water supply, treatment, or distribution systems, these interconnections and pump stations will provide potable water to OWASA's service area.

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Improve Transfer Capacity

- ◆ The I-40 Water Booster Pump Station site was selected as the first project because it provides the largest increase in capacity with minimal facilities. With the construction of the new pump station and associated transmission lines, the transfer capacity will almost double to a capacity of 7.1 mgd. It is located on the site of the existing I-40 Pump Station which will be demolished as part of this project.

Improve Operation and Design

- ◆ The operation of the pump station is intended for emergency use only. The facility would be operated periodically for a short duration to confirm functionality and perform routine maintenance. This operation would be during normal business hours. The pump station is designed to meet all the requirements of the Town of Chapel Hill's noise ordinance.
- ◆ The I-40 Water Booster Pump Station includes two pumps located in a small brick building. The brick building provides more security, better access for maintenance, and a safe work environment for OWASA staff. The building dimensions were kept to the minimum required for operation and maintenance of the station equipment. The building is designed to appear like a detached garage for the existing residential structure located on the property.
- ◆ Other project design goals include consolidating operations into two similar facilities, providing more reliable equipment, and providing better access to the equipment for maintenance and operation.

We look forward to working closely with the Town of Chapel Hill in obtaining an expedited approval for our booster pump station. Thank you for your support.

Sincerely,



Ed Kerwin
Executive Director

Attachment

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I-40 Booster Pump Station Location Map

