

February 6, 1999

TO: The County Board of Arlington, Virginia

FROM: William T. Donahue, County Manager

SUBJECT: Approve an Award of Phase IVA Flow Equalization Facilities Construction Contract at the Water Pollution Control Plant (WPCP) under Invitation to Bid No. 58-99.

RECOMMENDATIONS: Approve the award of a contract to _____ for the construction of the Phase IVA Flow Equalization Facilities project at the WPCP under ITB No. 58-99, in the total amount of \$ _____. The total amount includes a base of \$ _____ and a contingency of \$ _____. Delegate to the Purchasing Agent the authority to sign the contract documents, subject to legal review by the County Attorney.

ISSUES: None

BACKGROUND: Phase IVA Flow Equalization Facilities will improve the County's existing secondary treatment facilities so that the Water Pollution Control Plant can meet Stage 1 Biological Nutrient Removal (BNR) requirements. The BNR conversion is necessary in order to meet new discharge limits for ammonia and total nitrogen, as set by the Virginia Department of Environmental Quality, and to comply with requirements of the Chesapeake Bay Initiative. The removal of biological nutrients from wastewater improves the health of the Chesapeake Bay by reducing algae blooms and fish kills, and by allowing increased aquatic vegetation necessary for bay resources.

On March 27, 1997, Hazen and Sawyer (H&S) submitted a series of technical memoranda summarizing preliminary evaluations for possible Phase IVA improvements utilizing the BNR process. After review of the alternative layouts, it was decided to construct the Flow Equalization Facility on the north side of the plant and the Stage 1 BNR facility on the South side of the plant. In November of 1997, H&S commenced design work on the Flow Equalization tank.

It was decided to construct a 4.9 million gallon above-grade concrete prestressed tank with a pumping station to deliver primary effluent during high flows and a gravity drain for discharge during low flows. The requirement for the equalization tank is to provide a constant flow to the aeration tanks where it is crucial to the future BNR process. The tank is fully enclosed and includes odor control equipment.

Staff: Alan F. Cassel, Chief, WPCD

Jill Neuville, Director, DES

Reviewed by County Attorney: _____

The pump station was designed implementing the existing primary effluent channel for the wet well. It is sized for 36 MGD capacity to allow pumping of the high diurnal flow during dry weather flows to the tank. The pumps are located outside with an enclosed electrical compartment for the switchgear and VFD's.

On December 16, 1998, Invitation to Bid No. 58-99 was mailed out, and a prebid conference was held on January 6, 1999. Bids will be received on January 27, 1999 and a supplemental board report identifying the successful bidder and the bid price will be distributed.

SCOPE OF WORK: The scope of work for the construction of the Phase IVA Flow Equalization Facilities project consists of:

- Construction of new 36 MGD Primary Effluent Water Pump Station.
- Construction of new 156 foot diameter prestressed concrete Equalization Tank.

- Construction of interconnecting pipe and control valves.
- Demolition of Old Four Mile Run Relief Pump Station.
- Modifications to Primary Effluent Collector Channel.

The project is scheduled to be completed no later than four hundred consecutive calendar days after the Notice to Proceed. The contractor's schedule will be monitored by the independent program manager (CRSS).

The projected cost for this project is \$5,500,000. A seven and one-half percent contingency of \$412,500 is also requested in this board report. The total request for Phase IVA Flow Equalization Facilities construction cost allocation in this board report is \$5,912,500, which includes the seven and one-half percent contingency.

CONTRACTOR SELECTION: Eight firms responded to the County's prequalification request for Phase IV-A Flow Equalization Facilities project and the County prequalified eight firms to submit bids on this project. The following were the prequalified firms:

Allied Contractors, Inc.

Cianbro Corporation

Danis Environmental Industries, Inc.

English Construction Company, Inc.

Lane Construction Corporation

W. M. Schlosser Company, Inc.

Pizzagalli Construction Company

Norair Engineering Corporation

BID INFORMATION: This subsection will be completed in the supplemental report after receipt and evaluation of the bids.

FISCAL IMPACT: Funding for the construction services described above is available from Wastewater Bond Funds (030.A92).