

**INFORMATION REQUIRED TO ACCOMPANY
LEGISLATION MODIFYING CONTRACTS**

ORDINANCE NO. 1501-2006

**MODIFICATION NO. 3 TO CONTRACT FOR
PROFESSIONAL ENGINEERING SERVICES**

**JACKSON PIKE AND SOUTHERLY WASTEWATER TREATMENT PLANTS
SLUDGE HOLDING SYSTEM IMPROVEMENTS
PROJECT NOS. 650243 AND 650356**

1. Names of all companies bidding or submitting an RFP or RFSQ for the original contract

- A. BBS Corporation
- B. Camp Dresser & McKee
- C. Sverdrup Associates, Inc.

2. The location by City and State of all companies bidding or submitting an RFP or RFSQ for the original contract

- A. BBS Corporation, Columbus Ohio
- B. Camp Dresser & McKee, Worthington Ohio
- C. Sverdrup Associates, Inc., Columbus Ohio

3. The status, Majority, MBE or FBE, of all companies bidding or submitting an RFP or RFSQ for the original contract

- A. BBS Corporation, a Majority enterprise
- B. Camp Dresser & McKee, a Majority enterprise
- C. Sverdrup Associates, Inc., a Majority enterprise

4. The name and location of the firm awarded the original contract and the Contract Number

BBS Corporation, 1103 Schrock Road, Suite 400, Columbus, OH 43229, EL900349
(5/6/99)

5. A description of work performed to date as part of the contract and a full description of work to be performed during any future phasing of the contract

This Contract with BBS Corporation, now acquired by CH2M Hill and so referred to hereafter, provides engineering services for Sludge Holding System Improvements at both the Jackson Pike and Southerly Wastewater Treatment Plants. This project provides for construction of a sludge storage and sludge truck loading facility at both plants, and improvements to the Jackson Pike plants' flushing water, dilution water and potable water systems.

The engineering services provided under this contract are being accomplished in three Steps: Step 1 - Preliminary Design, Step 2 - Detailed Design, and Step 3 - Services During Construction.

Step 1 - Preliminary Design services begin with an investigation and evaluation of the existing facilities' records, function and condition; an investigation of process

technology and available equipment; and an evaluation of the present and future needs of the City in regard to the planned improvement. A detailed report is developed that describes the investigative efforts, provides a general plan for project improvements that includes viable alternatives, and provides recommendations for the City's consideration and determination of project direction.

Step 2 – Detailed Design services provide for development of a facility design that is detailed in written specifications and drawings for bidding the construction work of the Project, development of estimates of project cost and duration, and assistance with bid solicitation and evaluation.

Step 3 – Services During Construction provide for assistance to the City during construction of project improvements. Services provided under this contract are Technical and Field Services.

Technical and Field Services include providing interpretations and clarifications of the construction documents, responding to contractor's inquiries, reviewing and approving the contractor's submitted documentation, designing and documenting needed changes to the construction work, observing and verifying construction work, providing evaluations and recommendations on the acceptability of the contractor's work, equipment control software programming, observing facility testing and startup, providing training for plant operations and maintenance personnel, providing manuals for facility operation, and revising drawings of the facility as actually constructed.

Step 1 - Preliminary Design, and Step 2 – Detailed Design, are completed.

Step 3 – Services During Construction services are currently being performed.

When construction is completed and documented, no future phasing of this project or contract is planned.

6. An updated contract timeline to contract completion.

The Contract Notice to Proceed was issued May 24, 1999. CH2M Hill proceeded with work to investigate existing conditions and develop a general plan for the project improvements. A draft Detailed Design Memorandum (DDM) documenting the investigative efforts, alternatives, general plan and recommendations for project improvements was submitted to the City for review on January 28, 2000. On June 14, 2000 the final version of the DDM was submitted that included all revisions resulting from the City's reviews. The detailed design work then began for production of specifications and drawings for bidding project construction. The construction contract was advertised for bids, and bids were received on June 6, 2001. The construction contract was awarded and the Notice to Proceed was issued on December 4, 2001. Final Completion of construction was originally scheduled to occur on November 11, 2003, but the work was not substantially completed until February 2005. Final closeout of the construction contract will require additional funding. CH2M Hill Corporation services continued beyond completion of construction to provide "as-built" record drawings of the constructed facilities within 60 days of completion, and also to provide reporting on the status of operation of the constructed facilities one year after completion.

7. **A description of any and all modifications to date including the amounts of each modification and the Contract Number associated with any modification to date. (List each modification separately)**

ORIGINAL CONTRACT: \$3,087,443.00 (EL900349 May 6, 1999)

Funding was provided for Step 1 - Preliminary Design and Step 2 - Detailed Design services.

MODIFICATION NO. 1: \$0.00 (No Purchase Order)

This modification added design tasks that were realized to be necessary, and deleted design tasks that became unnecessary, as the design process progressed. No additional funding was needed.

MODIFICATION NO. 2: \$1,284,700.00 (EL001725 November 20, 2001)

This modification provided funding for Step 3 - Services During Construction for both CIPs.

8. **A full description of the work to be performed as part of the proposed contract modification. (Indicating the work to be a logical extension of the contract is not sufficient explanation.)**

PROPOSED MODIFICATION NO. 3: \$366,163.00

This modification provides \$366,163.00 of additional funding to complete Step 3 – Services During Construction. This modification will provide funding for:

- A. A greater level of effort and extended duration of technical and field services during construction than was estimated and funded in Modification No. 2.
- B. Additional engineering tasks that include investigation of the V-Ram sludge pump feed, investigation of a problem with a gravity thickener process “bottle neck”, an additional building regulations submittal, and preparation and submission of a storm water related “Notice of Intent” to the OEPA.
- C. Training for plant operations personnel on the constructed facilities.
- D. Increased costs for producing record drawings and manuals for facility operation.

9. **If the contract modification was not anticipated and explained in the original contract legislation a full explanation as to the reasons the work could not have been anticipated is required. (Changed or field conditions is not sufficient explanation. Describe in full the changed conditions that require modification of the contract scope and amount.)**

The need for additional funding is due to the following issues.

- A. The number of man-hours expended to respond to the construction contractor’s requests for information, to develop specifications for changes in construction work, to review/approve the construction contractor’s required documentation submissions,

and to attend project meetings was greater than the estimated man-hour allowances funded by contract Modification No. 2.

- B. The duration of construction has extended for an additional 24 month period beyond the original schedule, requiring continuation of services through the extended period. This was due to problems with revisions to the sludge silo gate controls that were found to be needed, problems with a roofing subcontractor's inability to complete work, delays in sludge silo testing due to delays in another construction contract, and problems with sludge silo level sensor operation.
- C. The need for additional engineering tasks became apparent only as components of the process system were made operational, revealing conditions that caused operational deficiencies.
- D. The designer was requested to provide additional training for the process system. This training was in addition to the individual equipment training provided by the construction contract's equipment vendors. The process system training provided the overall process scope of how each individual equipment item operated in the process system.
- E. With the duration of construction extending for an additional 24 month period beyond the original schedule, the costs to produce record drawings and manuals for facility operation has increased.

In any construction project, especially a project that includes rehabilitation of existing facilities, changes to construction are expected. In general, reasons for additional work include:

- F. Details of equipment and systems specified to be provided are reviewed and sometimes refined during construction in order to provide a facility that is optimally configured for operation and safety.
- G. Components of an existing facility are concealed and conditions cannot be accurately determined prior to construction work.
- H. Latent errors or omissions may exist in the design.

10. An explanation of why the work to be performed as part of the contract modification cannot be bid out. (Indicating the work to be a logical extension of the contract is not sufficient explanation.)

The funding provided by this contract modification is for continuation of the existing work of the contract. It is not deemed either feasible or reasonable to suspend work with the entity currently under contract, and undertake continuation of the work under a new procurement. The lengthy process for initiating a new procurement, and for a new entity to gain understanding of the project, would likely cause an unacceptable project delay and additional cost.

11. A cost summary to include the original contract amount, the cost of each modification to date (List each modification separately), the cost of the modification being requested in the legislation, the estimated cost of any future known modifications and a total estimate of the contract cost.

Original Contract	\$3,087,443.00
Modification No. 1	\$ 0.00
Modification No. 2	\$1,284,700.00
Proposed Modification No. 3	\$ 366,163.00
Anticipated future additions	\$ 0.00
Anticipated future reductions	<u>(\$ 322,885.61)</u>
CONTRACT TOTAL	\$4,415,420.39

COST SUMMARY NOTE: There is a \$322,885.61 amount remaining in the Contract for Design Services that is not needed for design work, and that will be cancelled at the conclusion of contract work.