

# MEMORANDUM

**To:** Board of Directors  
**From:** Gary W. Fern, P.E., Executive Director  
**Date:** January 13, 2010  
**Re:** CIP Authorizations/Update  
**cc:** James M. Bowling, IV

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The following projects require Board authorization:

- A. St. George Avenue – Buck Road Water Main Replacement Project:** Included in the FY 2010 CIP is the replacement of 6-inch diameter water main along St. George Avenue and Buck Road in Crozet. The ACSA staff drafted a Scope of Services for the project. Attached is a proposal letter and fee schedule from O'Brien & Gere Engineers dated January 12, 2010 in response to the Scope of Services. The ACSA staff has reviewed the documents and find them satisfactory. The estimated cost for design is \$124,300. In addition, it is anticipated that four (4) easements will be required for the project. The total cost for preparing the easements is \$3,800.00.

### **Board Action**

We request the Board of Directors appropriate \$128,100 from the FY 2010 3R Fund for the St. George Avenue – Buck Road Water Main Replacement Project.

- B. Oak Hill Phase 1 Sewer Project:** In anticipation of proceeding with the project, it is necessary to begin the process of preparing easements. It is expected that 53 easements will be required for the project. Draper Aden Associates (DAA) has prepared the attached proposal dated January 13, 2010. The cost for preparing the 53 easements is \$26,500. The ACSA staff has reviewed DAA's proposal and find it satisfactory.

### **Board Action**

We request the Board of Directors appropriate \$26,500 from the FY 2010 3R Fund for the preparation of easements for the Oak Hill Phase 1 Sewer Project.

- C. **Crozet Streetscape Projects:** Albemarle County is proposing to construct streetscape improvements along Crozet Avenue and the new Main Street in Crozet, Virginia and designated as Downtown Crozet Streetscape Projects – Phase 2 and 2A, respectively. The projects will include the relocation and extension of ACSA infrastructure. Attached are copies of the proposed agreements between the ACSA and Albemarle County for the projects.

### **Board Action**

We request that the Board of Directors appropriate \$53,500 from the FY 2010 3R Fund for the projects and authorize the Executive Director to execute the agreements.



January 12, 2010

Mr. Thomas A. Garrison, P.E.  
Senior Civil Engineer  
Albemarle County Service Authority  
168 Spotnap Road  
Charlottesville, VA 22911

Re: Response to RFP for the St. George  
Avenue-Buck Road Water Main  
Replacement Project

Dear Tom,

As requested please find attached O'Brien & Gere's proposed fee estimate for the subject project. This estimate was developed based upon the Scope of Services provided as well as prior project experience with ACSA. The following clarifications and assumptions were made in the development of this fee:

- It is assumed that the pipelines are hydraulically suitable for potable water and fire flow (if applicable) demands, as well as pressure, and will be replaced with the same size. It is understood that 6-inch mains will be upsized to 8-inch. No hydraulic modeling or projection of demands is included.
- It is our understanding that there are corrosive soils in the project area. The design effort will include means to provide enhanced corrosion protection.
- Survey for proposed utility installation in paved roadways will be performed from right-of-way (ROW) to ROW. Survey for proposed utilities outside of pavement will be performed to 25 feet each side of the proposed centerline of the ROW.
- Survey will be based on the NAD 83 horizontal and NAVD 88 vertical datum, US Survey Feet and benchmarks for every 300 feet.
- The project surveyor will call in a Miss Utility design ticket and wait for markout prior to field survey. The project surveyor will then survey above grade utility features such as paint, manholes, valve boxes, and fire hydrants. Subsurface utility location will include storm water and sanitary and other utilities, as required. The base mapping will be developed based on these items. The use of a utility designation firm is not anticipated unless critical utilities are identified during this effort.
- The fee estimate does not include the preparation of plats. Additional plats, if required will be provided at a unit cost of \$950/ea.

- The geotechnical scope assumes that all borings will be accessible by truck rig, and includes traffic control and cold patch pavement repair. A Geotechnical Engineering report will be prepared and will be referenced in the contract documents. The fee estimate does not include rock coring or soil laboratory testing.
- It is assumed that a traffic control plan will be required for this project and is included in the fee estimate.
- The preparation of a brief technical memorandum (TM) is anticipated as a deliverable with the 50% design submittal. A separate summary of preliminary engineering efforts is not anticipated. As the Authority is operating under a general permit and has the right of self-review, this TM is not required to conform to the requirements for a preliminary engineering report (PER) suitable for submission to regulatory agencies.
- The preliminary engineering phase will include a review of options for replacement of the water main under consideration including replace in place or alternative route (parallel) replacement. The Authority will provide the water main base information for O'Brien & Gere's use in determining if alternative is feasible and/or cost effective.
- The Authority will provide their front end documents and water and sewer design standards to be used in the development of specification packages.
- Bid and Construction Phase Services are not included in the current fee estimate.

We propose to perform this work under the terms and conditions of our annual services contract. The fee for services as set forth and described above shall be the lump sum of \$124,300 as detailed in the attached fee estimate, and shall be invoiced monthly on the basis of percent of services completed.

Upon your review, please contact me at your convenience with any questions or comments. We look forward to beginning on this project and working with your staff.

Very Truly Yours,

O'BRIEN & GERE ENGINEERS, INC.

A handwritten signature in black ink that reads "RE Bell". The signature is written in a cursive, slightly slanted style.

Robert E. Bell, P.E.  
Vice President

St. George Avenue-Buck Road Water Main Replacement  
 Albemarle County Service Authority

TASK	LABOR CLASSIFICATIONS						TOTAL (HRS)	DIRECT EXPENSES (\$)	COST PER TASK (\$)
	Project Officer	Managing Engr.	Sr. Proj. Engr.	Design Engr.	Sr. Design Drafter	Div. Secretary			
	\$215 (HRS)	\$160 (HRS)	\$125 (HRS)	\$85 (HRS)	\$80 (HRS)	\$60 (HRS)			
<b>PRELIMINARY ENGINEERING &amp; SURVEY</b>									
Project Kick-Off Meeting	0	4	6	0	0	2	12	-	\$1,510
Existing Data Collection and Assimilation	0	0	4	16	4	0	24	-	\$2,180
Right-of-Way Investigation for Alternative Routes	2	1	8	16	8	0	35	-	\$3,590
Criteria Collection, Analysis, and Reconciliation	0	0	4	16	0	0	20	-	\$1,860
Corridor Reconnaissance	0	0	8	8	0	0	16	-	\$1,680
Survey & Mapping	1	0	2	4	8	1	16	-	\$1,505
SUB-TOTAL							123	\$ 31,570	\$43,895
<b>50% DESIGN DOCUMENT DEVELOPMENT</b>									
Alignment Adjustment	0	1	4	16	24	0	45	-	\$3,940
Alignment Coordination	0	1	8	8	0	0	17	-	\$1,840
Geotechnical Investigation	0	0	2	4	4	2	12	-	\$1,030
50% Preliminary Design Documents	2	8	40	80	72	12	214	-	\$19,990
Public Outreach	0	4	8	2	2	4	20	-	\$2,210
50% Responsiveness Summary	1	4	2	2	0	2	11	-	\$1,395
SUB-TOTAL							319	\$ 12,357	\$42,762
<b>90% DESIGN DOCUMENT DEVELOPMENT</b>									
Plats	0	0	2	4	4	0	10	-	\$910
Test Holes	0	0	4	4	4	0	12	-	\$1,160
90% Preliminary Design Documents	2	8	40	40	60	8	158	-	\$15,390
Utility and Agency Submittal	0	0	8	24	4	8	44	-	\$3,840
90% Responsiveness Summary	1	4	1	2	0	2	10	-	\$1,270
SUB-TOTAL							234	\$ 1,503	\$24,073
<b>FINAL DESIGN DOCUMENT DEVELOPMENT</b>									
100% Final Design Documents	2	8	24	24	48	4	110	-	\$10,830
Provide Remaining Permit Applications	0	2	4	16	4	4	30	-	\$2,740
SUB-TOTAL							140	\$ 1,187	\$13,570
<b>TOTALS</b>							816	\$46,617	\$124,300



700 Harris Street, Suite E  
Charlottesville, Virginia 22903  
(434) 295-0700 • Fax: (434) 295-2105  
www.daa.com

January 13, 2010

Mr. Gary Fern, P.E.  
Executive Director  
Albemarle County Service Authority  
168 Spotnap Road  
Charlottesville, VA 22911

**RE: Oak Hill Sanitary Sewer Proposal  
DAA Proposal No. CV08119P**

Dear Mr. Fern:

Draper Aden Associates is pleased to provide you with this proposal for preparation of permanent and temporary construction easement plats for the Oak Hill Sanitary Sewer project. Based on the most recent project scope, we have estimated a total of 53 easement plats will be required for this project. A tax parcel breakdown of the each plat has been attached for your reference.

Draper Aden Associates proposes to prepare easement plats on a per plat basis for \$500/plat. Based on the estimate provided above, the total anticipated fee is \$26,500. We anticipate approximately 30-60 days will be necessary to complete plats. If desired, a more definitive delivery schedule can be established upon authorization to proceed.

All services will be performed in accordance with our previous annual contract. If you find this proposal to be acceptable, please sign below and return a copy to our office.

Sincerely,  
**DRAPER ADEN ASSOCIATES**

A handwritten signature in black ink, appearing to read "Thomas S. Cox", is written over a light blue horizontal line.

Thomas S. Cox, PE  
Vice President/Managing Principal

Enclosure: Oak Hill Sanitary Sewer Easements

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Agreed and Accepted  
Albemarle County Service Authority

Date

**AGREEMENT**  
**Between**  
**Albemarle County Service Authority**  
**and**  
**County of Albemarle, Virginia**  
**for**  
**Construction and Adjustment of Water Facilities**

THIS AGREEMENT, made and entered into as of the \_\_\_ day of January, 2010, by and between the ALBEMARLE COUNTY SERVICE AUTHORITY (herein after called UTILITY), and the COUNTY OF ALBEMARLE, VIRGINIA (herein after called COUNTY).

WITNESSETH

WHEREAS, the COUNTY is proposing to construct streetscape improvements within the County along Crozet Avenue (State Route 240) in Crozet, Virginia, designated as "Downtown Crozet Streetscape Project - Phase 2" and Project Number EN04-002-126, C501, which will provide the opportunity to construct and adjust the UTILITY'S water facilities: and

WHEREAS, it is in the best interest of the COUNTY and the UTILITY to have the construction and adjustment of the UTILITY's water facilities included in the COUNTY's Streetscape contract; and

WHEREAS, the COUNTY and UTILITY agree upon terms and conditions under which their respective improvements will be made as hereinafter set forth:

NOW THEREFORE, for and in consideration of the premises and of the mutual covenants herein contained, the parties hereto agree as follows:

SECTION I

- (a) The COUNTY, through its contractor, will construct the UTILITY'S water facilities in accordance with attached plans and the VIRGINIA DEPARTMENT OF TRANSPORTATION'S Road and Bridge Specifications; said plans being identified

as fifty-four (54) plan sheets numbered 1 thru 29, of the COUNTY'S Construction Plans for the "Downtown Crozet Streetscape Project - Phase 2" and Project Number EN04-002-126, C501.

## SECTION II

- (a) The UTILITY shall be responsible for 100% of the cost of the construction, including construction inspection and service connections not listed below in (b), of the water facilities at Jarman's Gap Road Station 20+00 (water extension to Carter St.) shown on sheet 14D of the COUNTY'S construction plans referenced in SECTION I (a), and including the cost of replacing all service connections, water meters and bases, asphalt pavement demolition, aggregate base material, and asphalt pavement as detailed on said sheets. The UTILITY shall reimburse the COUNTY for all such costs incurred through the COUNTY'S drainage contract, within 30 days of the COUNTY'S presentment of the relevant invoices to the UTILITY. Reimbursement shall be based on the unit prices in the streetscape contract, awarded by the COUNTY.
- (b) The COUNTY shall be responsible for 100% of the cost of constructing and adjusting the water facilities, including new water mains, appurtenances, service lines and materials, in CONFLICT with proposed streetscape improvements shown on sheets 13, 14, 14D and 15 of the COUNTY'S construction plans referenced in SECTION I (a).
- (c) Notwithstanding the foregoing, if the UTILITY determines that bids for its utilities obligations hereunder, made in response to the COUNTY'S contract procurement, are excessive, then the UTILITY may elect not to participate in the COUNTY'S construction contract, upon providing written notice of said election to the COUNTY. In such event, the UTILITY shall be responsible for procuring its own contract to complete all improvements referenced in Section II(a) above.

SECTION III

- (a) The UTILITY shall perform certain incidental work, such as operating all valves and inspecting the utility relocation work with its own forces, and reporting through the COUNTY'S Project Manager. Upon satisfactory completion, the UTILITY shall certify to the COUNTY and the VIRGINIA DEPARTMENT OF TRANSPORTATION that the work was performed in a satisfactory manner. The UTILITY will be reimbursed for the cost of inspection (at \$25.00 per hour) where water facility adjustments are the COUNTY'S responsibility.
- (b) The existing facilities to be abandoned are to remain *in-situ* after being filled with appropriate flowable material.

IN WITNESS WHEREOF, each party has caused this agreement to be executed in duplicate in its name and on its behalf by its duly authorized officer as of the day and year first above written.

In the presence of:

ALBEMARLE COUNTY SERVICE AUTHORITY

\_\_\_\_\_  
As to the Albemarle County  
Service Authority

by: \_\_\_\_\_  
Gary W. Fern, P.E.  
Executive Director

In the presence of:

COUNTY OF ALBEMARLE, VIRGINIA

\_\_\_\_\_  
As to the County of Albemarle,  
Virginia

by: \_\_\_\_\_  
Robert W. Tucker, Jr.  
County Executive

**AGREEMENT**  
**Between**  
**Albemarle County Service Authority**  
**and**  
**County of Albemarle, Virginia**  
**for**  
**Construction of Water Facilities**

THIS AGREEMENT, made and entered into as of the \_\_\_ day of January, 2010, by and between the ALBEMARLE COUNTY SERVICE AUTHORITY (herein after called UTILITY), and the COUNTY OF ALBEMARLE, VIRGINIA (herein after called COUNTY).

WITNESSETH

WHEREAS, the COUNTY is proposing to construct a segment of the new Main Street within the County from Crozet Avenue (State Route 240) in Crozet, Virginia, and designated as "Downtown Crozet Streetscape Project - Phase 2A", which will provide the opportunity to construct the UTILITY'S water facilities: and

WHEREAS, it is in the best interest of the COUNTY and the UTILITY to have the construction of the UTILITY's water facilities included in the COUNTY's Main Street contract; and

WHEREAS, the COUNTY and UTILITY agree upon terms and conditions under which their respective improvements will be made as hereinafter set forth:

NOW THEREFORE, for and in consideration of the premises and of the mutual covenants herein contained, the parties hereto agree as follows:

SECTION I

- (a) The COUNTY, through its contractor, will construct the UTILITY'S water facilities in accordance with attached plans and the VIRGINIA DEPARTMENT OF TRANSPORTATION'S Road and Bridge Specifications; said plans being identified

as thirty-seven (37) plan sheets numbered 101 thru 121 of the COUNTY'S Construction Plans for the "Downtown Crozet Streetscape Project - Phase 2A".

## SECTION II

- (a) The UTILITY shall be responsible for 100% of the cost of the construction, including construction inspection and service connections not listed below in (b), of the water facilities from Station 13+98 to Station 17+85 shown on sheet 113 of the COUNTY'S construction plans referenced in SECTION I (a), and including the cost of all waterline items and appurtenances detailed on said sheets. The UTILITY shall reimburse the COUNTY for all such costs incurred through the COUNTY'S Main Street contract, within 30 days of the COUNTY'S presentment of the relevant invoices to the UTILITY. Reimbursement shall be based on the unit prices in the Main Street contract, awarded by the COUNTY.
- (b) The COUNTY shall be responsible for 100% of the cost of adjusting the water facilities, including new service lines and materials, in CONFLICT with proposed alley improvements shown on sheet 115 of the COUNTY'S construction plans referenced in SECTION I (a).
- (c) Notwithstanding the foregoing, if the UTILITY determines that bids for its utilities obligations hereunder, made in response to the COUNTY'S contract procurement, are excessive, then the UTILITY may elect not to participate in the COUNTY'S construction contract, upon providing written notice of said election to the COUNTY. In such event, the UTILITY shall be responsible for procuring its own contract to complete all improvements referenced in Section II(a) above.

## SECTION III

- (a) The UTILITY shall perform certain incidental work, such as operating all valves and inspecting the utility relocation work with its own forces, and reporting through the COUNTY'S Project Manager. Upon satisfactory completion, the UTILITY shall certify to the COUNTY and the VIRGINIA DEPARTMENT OF

TRANSPORTATION that the work was performed in a satisfactory manner. The UTILITY will be reimbursed for the cost of inspection (at \$25.00 per hour) where water facility adjustments are the COUNTY'S responsibility.

IN WITNESS WHEREOF, each party has caused this agreement to be executed in duplicate in its name and on its behalf by its duly authorized officer as of the day and year first above written.

In the presence of:

ALBEMARLE COUNTY SERVICE AUTHORITY

\_\_\_\_\_  
As to the Albemarle County  
Service Authority

by: \_\_\_\_\_  
Gary W. Fern, P.E.  
Executive Director

In the presence of:

COUNTY OF ALBEMARLE, VIRGINIA

\_\_\_\_\_  
As to the County of Albemarle,  
Virginia

by: \_\_\_\_\_  
Robert W. Tucker, Jr.  
County Executive